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Volume I

SPANISH MOROCCO AND THE TANGIER ZONE

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Geography Division

African Section

Office of Strategic Services

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Ask Miss Vallance

The first three sections of this study (A Strategic Consideration of the Geography, Landing Beaches, and Strategic Aspects of the Climate) were prepared by the Geography Division.

The sections on Government and Politics, Native Life and People, Who's Who, Health Conditions, Town Water Supplies, Bulk Fuel Storage, Electric Power, Telecommunications, Airfields, Ports, Railroads, and Roads, were prepared by the African Section.

A second volume entitled Economic Resources has been prepared by the Economics Division.

* * *

The material on Spanish Morocco and the Tangier Zone which was included in the study, Morocco, 3 August 1942, has been revised, expanded, and brought up to date.

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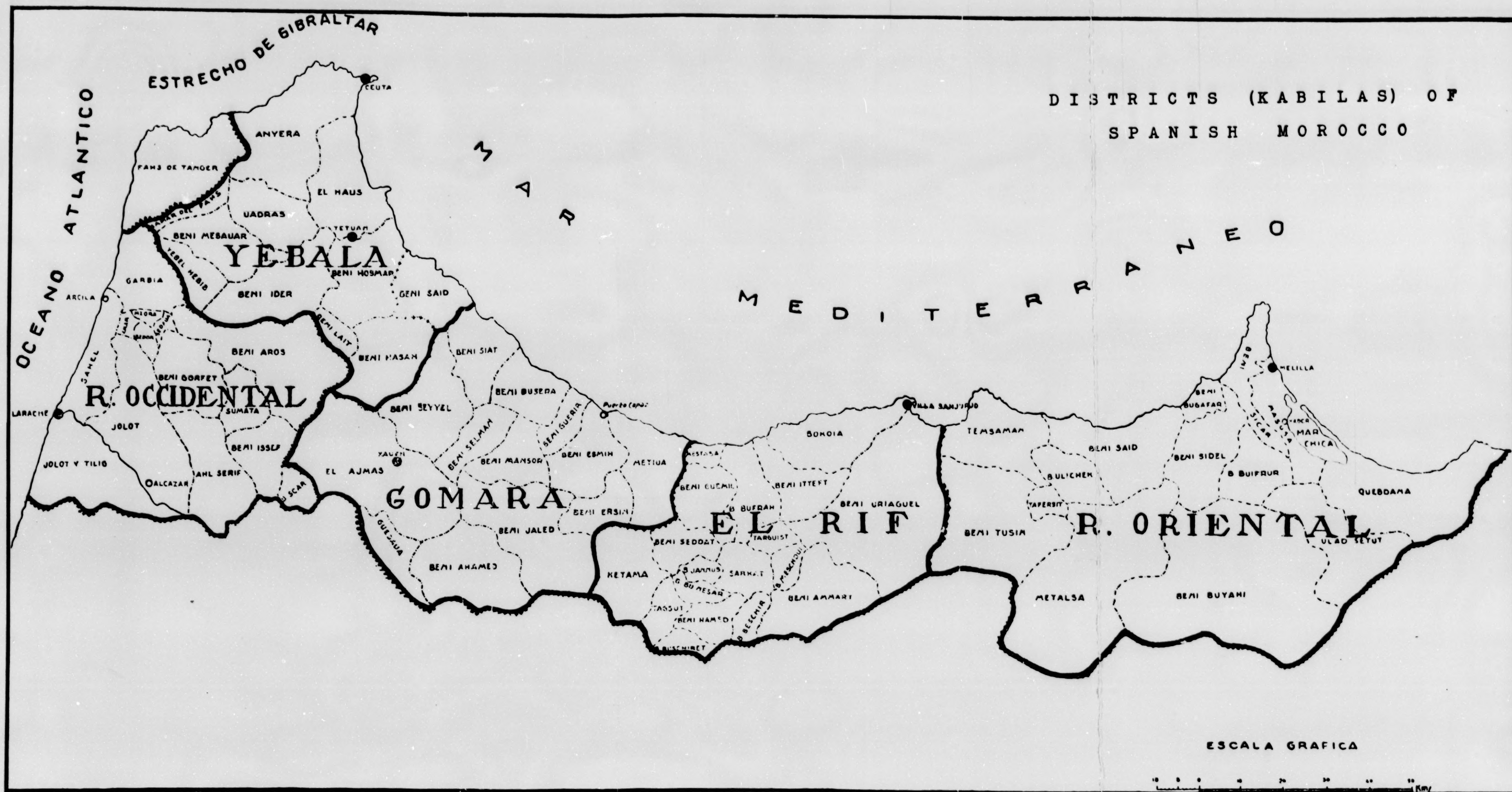
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A STRATEGIC CONSIDERATION OF
THE GEOGRAPHY OF
SPANISH MOROCCO AND THE TANGIER ZONE

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A STRATEGIC CONSIDERATION OF
THE GEOGRAPHY

General Geographic Factors

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Summary

Convoys could make the trip from a number of ports in Southern Spain to the coasts of Spanish Morocco in one night. Communication between Spanish Morocco and French Morocco, however, is easy only on the western and eastern extremes of the colonial frontier. From these points it is only a short distance to the main Allied land supply lines leading from the Atlantic to Algeria and Tunisia. This is especially true on the east near Melilla, where the Moroccan-Algerian railway and road are only 20-30 miles from the frontier. Good roads could serve an Axis advance from these eastern and western extremes, whereas the rugged Riff mountains along the border are crossed only by three road tracks (pistes), which are impassable in winter. Conversely if allied forces moved into western and eastern Spanish Morocco (Larache-Tangier area on west, Melilla area on east) they would be in a position either to occupy all of Spanish Morocco or to pin possible axis forces to rough, and in winter rainy, central Spanish Morocco, from which enemy advances would be difficult; at the same time allied supply routes from French Morocco would be relatively good.

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I. Landing of Troops in Spanish Morocco

The southern Spanish coast and the ports of Almeria and Malaga are only about 110 miles from the Spanish Moroccan coast and the ports of Melilla and Villa Sanjurjo (Villa Alhucemas). Other more dangerous crossings in the vicinity of Gibraltar are also short. From Malaga to Ceuta or coastal points near Tetuan is only about 80 miles, and the distance across the Straits of Gibraltar much less. On the Atlantic side the distance from Cadiz to Larache is only 90 miles. Convoys therefore could negotiate these passages in the hours of darkness. From the Spanish naval base of Cartagena, however, the distance to Melilla is about 210 miles, which could be covered only by fast naval vessels or liners in one night.

On the coast of Spanish Morocco are a number of landing places (see landing beach study), but only on the western and eastern ends of the country is access to the interior good (Tangier - Ceuta - Tetuan - Larache area on the west, Melilla area on the east). Villa Sanjurjo (Villa Alhucemas) is the only point between Tetuan and Melilla with all-weather road connections to the interior, since the one Spanish Moroccan east-west highway dips down to the sea at this one point. However Villa Alhucemas' connections with French Morocco are not direct but involve using the roads leading south from the ends of Spanish Morocco.

Three minor points on the coast have poor seasonal tracks connecting with the interior; they are: Puerto Capax and Torres de Alcala west of Villa Alhucemas and Sidi Amar U Musa to the east.

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The main Spanish road (the east-west highway), runs near or along the crest throughout most of central Spanish Morocco, and the Spanish Moroccan border lies south of the crest, so that the gradient is downhill to French Morocco along most of the border. South of the border in French Morocco, however, is the Pre-Rif mountain area, which, although not as high as the Rif itself, is nevertheless a very rough zone extending in places some 40 miles south of the border.

In the Melilla area low ground gives access to the interior of French Morocco; hills and sand dunes cause some local interruptions to movement but there are several low routes available, especially for penetration east and southeast. Attack from this quarter would be especially dangerous for the Allies since the main land supply route followed by the railway and road running from the Atlantic to Algeria runs only 20-30 miles south of the frontier.

On the Atlantic coast the Rif mountains extend almost down to the sea near Tangier and Cuta on the Straits of Gibraltar, but elevations are lower and a low passageway leads from Rio Martine on the Mediterranean through Tetuan to the Atlantic. South of Tangier the mountains swing southeasterly, and leave a coastal plain along the Atlantic of increasing width as one goes south (at the French Moroccan border,

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25 miles wide). From Tangier to Arzila some marshes fringe the coast, but south of Arzila to the frontier marshes are few. From the frontier south an almost continuous line of sand dunes fringes the coast. The only barrier of any consequence as one goes south across the fertile Rharb plain is the Sebou River and its associated marshes (Morjas), about 25 miles south of the border. The Sebou is about 100 yards wide and overflows its banks from November to April, flooding much of the surrounding marshes to a depth of 12 feet. For this reason mechanized movement would be channelized onto the main roads in winter.

Precipitation

Just as the relief is greatest along the western and central Spanish Moroccan frontier, so also is the rainfall. In the highlands, especially on the south slopes exposed to Atlantic winds, the annual average fall is more than 35 inches, concentrated sharply in winter with November the maximum month. In the high Riff much precipitation comes in the form of snow. Some forests are found in these rainy areas. Erosion is severe and many valleys have been formed. In many places the soil, although thin, becomes slippery when wet, and makes movement difficult. The French consider side roads (pistes) impassable in winter in all of Spanish Morocco and northern French Morocco, west of the Melilla area. Immediately along the Mediterranean coast at lower elevations, the rainfall is much

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scantier - less than 20 inches is common. The rainfall is concentrated in winter (for a detailed treatment see forthcoming climate report on Spanish Morocco).

Roads

As indicated earlier, only on the western and eastern ends of Spanish Morocco are there good road connections with French Morocco. From Tangier and Ceuta-Tetuan through paved roads lead South; from Tangier a standard gage railroad connects with the French Moroccan system. This is the only railroad connection between the colonies. From Melilla a through paved road runs east, and an improved road runs south to French Morocco. A local narrow gage railroad runs a few miles south from Melilla to iron mines, but does not connect with other railroads. On the western end of Morocco a new road, fairly well built, leads from the neighborhood of Xauen in Spanish Morocco across mountains to Ouezzane in French Morocco. Northern connections to this road are occasionally snow-blocked in winter. Three poor summer tracks cross the main Rif and Pre-Rif along the central border. These are closed by snow in winter. Thus good roads exist only in the east and west, leading south from the Tangier-Ceuta-Tetuan area and the Melilla area. Villa Alhucemas, west of Melilla has the main east-west Spanish Moroccan road coming down to it from the south and southwest, but there are no good, or even reasonably passable connections direct with French Morocco. On the

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French Moroccan side of the frontier there are several feeder roads leading north short distances from the trans-Moroccan highway.

In the Rif and Pre-Rif the fierce Rif tribes live. In their mountain fastnesses, untouched by roads, they defied conquest for years, and even today are not completely pacified. These fierce tribes can potentially augment the barrier quality of the Rif and Pre-Rif, depending on their political attitude at the moment.

II. Allied Resistance and Counter Measures

The same barriers to southward movement bar northward movement. Only on the west and east is access to Spanish Morocco easy.

Western Morocco

If the Allies moved northward up to Larache or Tangier in the west they would be in a position to establish a battle line through mountainous country, inasmuch as the Rif Mountains swing close to the Atlantic coast in this northern area. Farther south, along the Spanish Moroccan border, the lowland is wider. If the Axis forces should cross the border on the one good road (paralleled by the Tangier-Petit-jean railroad) they would be able to operate over the fertile, level coastal plain extending south. In this case the first barrier (especially in the winter rainy season) would be the lower Sebou and its associated

(6211) marshes, about 25 miles south of the border.

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Eastern Morocco

South and east of Melilla the terrain is relatively level, as mentioned earlier, and two good roads (the easterly one being paved) provide easy access to French Morocco. Furthermore, rainfall is so much less that many side roads (pistes) are passable in winter in this district. Therefore, if the Allies moved into Melilla and the lowland surrounding it, they could establish a mountain battle line somewhat the same as in a similar move north toward Tangier. Such a move might be particularly desirable, since the main east-west highway and railway run so close to the Spanish Moroccan frontier in this area (20 to 30 miles) and there is no well defined barrier to protect this route on the north.

If it were considered desirable to occupy all of Spanish Morocco, penetration from the east and west, as indicated above would still be the best means of moving into the area from the south. The east-west highway provides the only good means of entrance into central Spanish Morocco. Landings from the sea in the vicinity of Melilla, and some other coastal points likewise might be employed in conjunction with such an advance.

Principal Sources

Morocco, Vol. 1. African Section, Geography Division,
Western European and Near East Sections, Office
of Strategic Services (Revision of Oct. 23, 1942).

Morocco, Vol. V. Highways of French and Spanish Morocco
and the Tangier Zone. Geography Division and African
Section, Office of Strategic Services, Oct. 23, 1942
(Bibliography).

I.S.I.S. Report on Northwest Africa (September 1942).

I.S.I.S. Report on Tangier, Spanish and French Morocco
(Nov. 1940).

Fogg, Walter. "The Sebou Basin", Scottish Geographical
Magazine, Vol. 47, 1931, pp. 80-97.

Bernard, A. Geographie Universelle, Vol. XI; 1st part:
Generalites Afrique du Nord (Paris, 1937).

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LANDING BEACHES
OF
SPANISH MOROCCO AND THE TANGIER ZONE

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LANDING BEACHES

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Summary

The coast of Spanish Morocco and the International Zone may be divided into two parts separated by Cape Spartel at the western end of the Strait of Gibraltar. Southward along the Atlantic Ocean the coast is low and sandy with a regular coastline exposed to the full force of the Atlantic swell.

The Mediterranean coast stretching east and southeast from Cape Spartel is generally hilly to mountainous. Over most of the stretch beaches are narrow or absent and sea cliffs of varying height occur. Filled estuaries of moderate size form the principal coastal lowlands. Waves are lower than on the Atlantic coast and the tidal range is small.

The principal limiting factors for landing operations on the Atlantic coast are the lack of shelter and the prevalence of dangerous reefs and shoals near the shore. Landing areas are available at Joremiás Anchorage, Arzila and Larache, the first being the best.

The usefulness of landing beaches on the Mediterranean coast is limited by the scarcity of good anchorages, the extremely rugged hinterland and inadequate road and rail connections with the interior. Moderately favorable conditions exist near Tangier, Ceuta, Tetuan, Villa Sanjurjo (Villa Alhucemas) and Melilla.

ATLANTIC COAST OF SPANISH MOROCCO

Cape Spartel--Border of French Morocco~~CLASSIFICATION~~

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The Atlantic coast of Spanish Morocco, except for the area near Cape Spartel, is backed generally by rolling plains rising to low heights. Sandy beach is almost continuous along the coast and dunes are common. These migrate along the coast instead of inland. Much of the land immediately behind the dunes is swampy but parts of this wet land are divided into fields and are used for stock raising during the dry season (summer).

The coast is considered clean and may be approached safely within $2\frac{1}{2}$ miles anywhere, having due regard for winds and currents. Very little is known of the inshore hydrographic details. H.O. Charts 1246 and 2195 state that the location of the coast is not known within 1 to 3 miles. Aerial photos show that rock reefs and submerged bars are common in the inshore area. The sea bottom is spotty, with sand, mud, gravel, shell and rock in the offshore; it shoals rapidly landward to the shallows (less than 30 feet deep). Everywhere along the coast the 30 foot depth-contour lies within 2 miles of the coast. In the shallows the bottom is rock, generally covered by a layer of sand; in places this veneer is so thin that anchor flukes penetrate to solid rock. Extensive sand bars encumber the estuary of the Lukkus River. These obstructions are largest at the

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end of the dry season (summer), but are removed by the winter floods.

The tidal wave is propagated from south to north along the Atlantic coast of Morocco. The tidal range is more than $3\frac{1}{2}$ feet but less than 10 feet, probably being generally largest in the south. Tidal currents are generally strong near the mouths of the large rivers. The Canary Current, a cold stream, flows along the coast from Arzila southward. Its velocity is about 1 to $1\frac{1}{2}$ knots, occasionally increasing to 2 knots under the influence of sustained strong north winds. Low water temperatures (59° - 68° F.) prevailing in the current decrease the summer heat along the coast and give rise to climatic conditions somewhat resembling those of the coastal areas of southern California and lower California. A weak tidal current, flows from Arzila to Cape Spartel, and around it, increasing in strength as it proceeds northward. Counter currents occur in most of the bays. Large waves which make landings difficult occur almost continually along the coast. During the summer, from about April to October, landings are possible on most days but, during the winter, conditions are unfavorable. In December, January and February, the months with the largest waves, landings may be effected on less than 50 per cent of the days. The waves which break in heavy surf on this coast are the long swells from the North Atlantic. Offshore

they resemble the swells on the coast of eastern United States; but, due to the steep slope of the Moroccan coast, they break with greater violence there than on American shores.

The largest swells ordinarily are associated with atmospheric depressions (low pressure areas) passing between the Azores and Iceland. The swells are heaviest when the lows are well-developed and when either northwest winds or calms prevail between the point of origin and the Moroccan coast. Southeast winds between the path of the lows and the coast decrease the height of the swells. These swells require 2 to 4 days to reach Morocco.

A second type of swell originates from lows passing from the Azores to Portugal or the Gulf of Gascony. These are smaller than the preceding type and require only 1 or 2 days to reach the coast. Anticyclonic (high pressure) conditions between Morocco and the depression greatly reduce or may even eliminate the swell. The periods of the swells vary from about 7 to 21 seconds. Short period waves (7-10 seconds) generally develop off the coast of Portugal from north winds or from a depression nearby. Waves of longer period are associated with the passage of lows at greater distances, the height of the waves being related to the intensity of the depression. Very high waves (25-30 feet high) may occur once or

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exceed 30 feet. These largest waves arrive at intervals of 18 to 21 seconds and arrive without warning during the period of November to February. The following table presents the results of observations over a period of 7 years.

Number of Days Per Month Wave Was Observed

Wave Height Ft.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
No wave	3	0	6	3	4	9	10	7	9	4	5	4
1.5 to 4.5	8	8	11	12	21	15	19	20	16	14	12	12
4.5 to 9.0	13	12	10	12	5	6	2	4	5	8	8	9
9.0 to 15.0	6	6	4	3	1	0	0	0	0	4	4	4
above 15.0	1	2	0	0	0	0	0	0	0	1	1	2

Along the Atlantic coast of Spanish Morocco waves generally break as much as $\frac{1}{2}$ mile offshore in water 30 to 50 feet deep; and a belt of surf several hundred feet wide is common. As waves break at depths varying from the height of the wave to double that measurement, it is possible to estimate for any given time and place the approximate depth of water in which breakers occur. The waves approach from a general westerly direction, the heaviest from the northwest, the lightest from the southwest.

Communication by railway, road and trail is easy. A coastal highway runs approximately parallel to the shore as far south as Larache then swings inland to Alcazarquivir. Standard gauge railroads connect all important coastal cities. The native vegetation

along the coast consists of brush with occasional low trees. It would afford only meagre concealment for troops.

Cape Spartel to 3 Miles Beyond Arzila (Arcila)

The Atlantic coast south of Cape Spartel trends approximately south. For the first 17 miles, to the mouth of Oued Tzahadartz it lies in the International Zone. Cape Spartel is rugged, with elevations of several hundred feet close to shore. Immediately south, however, the coast becomes low and sandy with beach extending to a point 3 miles beyond Arzila. The offshore hydrography apparently is clear to the 30 foot line.

Inland from the beach are considerable areas of swamp which, in summer, become dry enough for stock raising. Beyond these at distances of 3 miles or more from the shore are hills which rise to elevations of about 600 feet within 5 miles of the coast. Swamps are especially extensive near Oued Tzahadartz and a lake (Mare Kerinar) lies in the flood plain of the river. In the southern part of this stretch the railroad from Tangier to Casablanca lies within one or two miles of the coast and the highway between these cities lies about the same distance farther inland. Both routes traverse considerable areas of swamp.

Four landing areas may be designated on this part of the coast. In order from north to south they are:

- a) Jeromias Anchorage
- b) Jeromias Anchorage to Oued Tzahadartz
- c) Oued Tzahadartz to Arzila
- d) Arzila

Of these only the more important (a) and d)) will be discussed.

Jeromias Anchorage

Jeromias Anchorage, about $3\frac{1}{2}$ miles south of Cape Spartel has good landing beaches which extend from the Cape south approximately 5 miles to Oued Bugadu. There are 3 beaches. The northernmost, between Cape Spartel and Cape el Rhobina is $\frac{1}{2}$ mile long and 800 feet wide at mean tide. The second, between Cape el Rhobina and Cape Arha Kara (Ras Axakar) is $\frac{3}{4}$ mile by 800 feet. And the third extends from Cape Arha Kara, 13 miles south to the Spanish Moroccan boundary. Its width varies from 800 feet to $\frac{1}{4}$ mile. Cape Arha Kara is 10 miles by road southwest of Tangier and 3 miles from Cape Spartel.

These three beaches are suitable for landing all types of military equipment which does not require the use of port facilities. The beach is firm, even the stream beds and marsh bottoms supporting mechanized equipment. Sand, shells and gravel bottom affords good anchorage but there is protection only from east winds. The tidal range, $6\frac{1}{2}$ feet,

does not hamper the grounding of boats. The prevalent heavy surf is the principal handicap to landing operations.

Landing area includes three beaches in the vicinity of Arzila. This town ($35^{\circ} 28' N.$, $6^{\circ} 2' W.$) is a military post with a small harbor now silted up. It lies 29 miles southwest of Tangier and 25 miles northeast of Larache.

The principal landing beach extends from the town northward for about 4 miles, and is from 500 to 1000 feet wide. At the mouth of the Wadi ol Holu the approach is clear but the river mouth shifts and the adjacent beach is soft and muddy. Immediately north of the Wadi a reef extends along the coast for $3/4$ mile and a shoal with a minimum depth of 18 feet lies $1/2$ mile north of the Wadi and $1/2$ mile offshore. Except near the Wadi the beach is firm. A second beach, located in the harbor is about $1/2$ mile long and very irregular in shape. It is the best landing place but there are scattered rocks near the mouth of the harbor. The slope of the beach is 10 feet per 100 between high and low water (double that of the other beaches in this area). South of the breakwater is another small beach 400 by 500 feet. It lies between reefs and scattered rocks which make approach difficult.

At all these beaches the surf is heavy being

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especially so at the mouth of the Wadi ol Holu.

Furthermore, the anchorage is poor as the bottom consists of rock with a thin veneer of sand offshore and scattered patches of thin sand inshore.

Inland from the beaches is a rolling plain then hills 7 1/2 miles from the coast and beyond those are mountains. The country is lightly wooded with the chief highway lined with trees. The railroad thru Arzila runs northeast to Tangier and southeast for 150 miles to Fez via Meknes (35 miles west of Fez).

Three Miles Beyond Arzila to Larache

Southward from a point 3 miles beyond Arzila low hills fringe the coast to Larache. The land rises to 325 feet within half a mile of the shore; sea cliffs are prominent in the north and the beach occurs only as a 10 mile stretch north of Larache. In this area, except near Larache, operations would be hampered by inadequate roads leading to the main highway about 2 or 3 miles inland.

Larache is a garrison town located on the summit and north slope of a hill 100 to 175 feet high south of the mouth of Rio Lukkus (Rio Lucas, El Qus or El Khos). It serves as a port for the surrounding district. A beach about 9000 feet long and 700 feet wide at high tide extends northward from the Rio Lucas to a point several miles beyond Punta Negra.

Landings may also be made within the river

entrance along the north bank, and on a small beach about 500 feet long by 700 feet wide, formed behind a training wall or dike, on the south bank of the river immediately inside the entrance.

The beach extending north along the coast is excellent as is the small one inside the river mouth. The sand is firm to hard when wet but becomes loose when dry. It forms dunes less than 80 feet high which are migrating inland between the river mouth and Punta Negra. To the north the dunes are fixed by vegetation. These dunes are only fairly firm to soft. The beach to the north of the river becomes steeper during storms and underwater bars, common at all times, become larger and more numerous.

Spring tides rise 10 1/4 feet above mean low water and neap tides rise 8 1/4 feet. This has an important influence upon the rise of the beach inside the river mouth as the natural depth over the bar is only about 3 feet and may be reduced to almost zero by silting during storms.

The bottom is sand and mud which affords good holding ground but the bottom contours are irregular.

Surf occupies a belt 600 to 1000 feet wide off the beach north of the river causing difficulty in landing.

Arzila lies 26 miles north on a tarred road,

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the chief highway from Tangier to Port Lyautoy, Casablanca and south. South from Larache this road runs through Alcazarkobir (22 miles). A secondary road runs east about 12 miles to cross the railroad from Tangier to Meknes near El Tzolatzza. A single-track standard-gauge railroad, which connects with the wharf, runs to Alcazarkobir and joins the Tangier - Meknes - Fez line.

Larache to the Border of French Morocco

Southward from Larache to the border of French Morocco are plains and low rolling hills with occasional small patches of swamp near the coast. Sea cliffs are continuous throughout this stretch rendering it unsuitable for landing.

It should be noted, however, that sand beach exists in adjacent French Morocco, although it is not especially desirable because of heavy swells and the absence of railroads and principal highways.

MEDITERRANEAN COAST
Cape Spartel to Ceuta

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This strip of coast borders the Strait of Gibraltar; the western half lies in the International Zone and the eastern half is in Spanish Morocco. Except near Tangier where low hills prevail, the terrain is rugged with steep slopes rising from the sea to elevations of more than 1500 feet within short distances. Main highways are scarce and some possible landing areas are isolated from their neighbors.

Ten landing areas are present in this stretch of coast but of these the ports of Tangier and Ceuta appear to be the best. Two others afford possibilities of flanking attacks on the ports. In all ten areas the offshore hydrography is clear to the 30 foot depth-contour except for a shallow area in Tangier Bay. The 30 foot line seldom lies more than 1/2 mile from the coast.

Tangier

The Tangier Bay area located about 7 miles east of Cape Spartel, includes 4 beaches, three of which are in the bay and one at the mouth of the Judios River west of the bay.

With the exception of the beach at the mouth of the Judios River, which consists of two rock terraces thinly covered with sand, the beaches are of fine sand with some pebbles, broken rock and shells. The sand is hard when wet but becomes soft and loose when thoroughly dry.

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The largest beach which extends 15000 feet along the south side of the bay is 500 feet wide at low tide. It is cut by the mouth of the Oued el Morora which flows behind the beach for 5000 feet thus decreasing the value of that part for landing operations. The western part of the beach is encumbered by oyster beds and low stone groins.

Along the eastern side of the bay are two beaches respectively 1700 by 200 feet and 800 by 100 feet. They are separated from each other and from the large beach by high ground which is impassable at the shore. The beach at Judios River is somewhat isolated but permits movements to the interior by climbing a steep mud slope. This beach might be of value in flanking operations in an attack on Tangier.

The western section of the bay has a rocky bottom for about 600 yards outside the 18-foot curve. Nearly all the southern shore has from 30 to 40 feet of water at 1800 feet offshore except near Bouree Rock and Fort Kandouri where rocks and foul ground extend 600 to 900 feet seaward. The rocks around Malabata Point extend about 1500 feet southwest of the point.

Tangier to Coute

Along the bold and rugged coast between Tangier and Coute there are several protected coves which contain beaches apparently suitable for landing.

About 7 1/2 miles west of Punta de Alcazar near the mouths of two small streams, Oued Kankush and Oued Sirriai there are several beaches. Of these, two may be practical for landings. One at the mouth of Oued Sirriai is 1/4 mile long and 150 feet wide. Tangier is approximately 10 miles to the west by highway.

Approximately 2 1/2 miles farther east at the mouth of Oued el Lyam is a beach more than 1/2 mile long and about 200 feet wide, increasing to 800 feet at the stream. Tangier, 8 miles southwest by straight line, may be reached by poor and indirect roads.

At the town of El Had, near Punta de Alcazar there is a beach nearly 1/2 mile long and less than 200 feet wide. It lies near a highway to Couta which is 13 miles northeast by air-line but at least twice that distance by road. Totuan, 25 miles southeast, may be reached by highway.

Farther east at Punta Cires and Rmel Beach are beaches 1/2 mile by 300 feet and 1 1/8 miles by 200 feet. They are 3/4 mile apart and are separated by a hill 740 feet high. Roads connect both beaches to the highway leading about 10 miles west to Couta. Punta Croucos, 2 miles farther east, adjoins a small bay with a beach 1/2 mile long and 100 feet wide; no roads lie near it. Benzou Bay, 6 miles west of Couta has 5 small beaches about 500 by 200 feet except the westernmost which is 1/4 mile long and 100 feet wide.

There are no road connections

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Near all of these beaches the offshore bottom is steep and the bottom material is rock and gravel. Except for the area near Oued Kankush and Oued Sirriai the offshore approaches are clear with no islands or reefs.

Couta

The Couta landing area is located on the headland separating the Strait of Gibraltar from the Mediterranean Sea at the eastern entrance to the strait. The city is located on a low isthmus connecting a former rocky island with the mainland.

A very narrow beach, rarely 100 feet wide, extends from the western edge of town about 4 miles to Punta Blanca. It is fronted by rocks and shoals along almost its entire length. Just east of the eastern harbor breakwater is a small pocket of sand, about 700 feet long and 200 feet wide.

Along the Mediterranean shore a relatively narrow and discontinuous beach lies between Punta Zorra and Punta del Canto. It includes three potential landing sites. The northernmost is about 1/2 mile long and 200 feet wide and the others are 1000 feet and 800 feet long respectively and 100 to 200 feet wide.

The narrow beaches of the Strait probably are steep and include local patches of shingle or rock. On the Mediterranean shore the beaches may be assumed to be of sand with low slopes. It is believed that the pocket beach east of the harbor and those of the

Mediterranean shore should be firm except near river mouths. The steep beaches of the Strait should be fairly firm to soft locally.

For all these beaches the approach is clear to the 30 foot line which lies very close to the shore along the coasts of the Strait and the peninsula.

Shoreward from the 30-foot curve the bottom rises rather steeply along the Strait and more gradually south of town. Shoals and reefs are very common west of the harbor and along the rocky part of the peninsula. South of Ceuta reefs occur at Punta Zorra and Punta del Canto as well as locally along the shore.

The harbor is about 60 feet deep at the entrance and 50 feet inside. A narrow canal crosses the isthmus near the mainland.

Inland from the beaches the land generally rises rather steeply, reaching elevations of more than 400 feet a short distance west of town. The slopes are moderately dissected, and numerous steep-walled ravines radiate toward shore.

Ceuta to a Point 4 Miles South of Rio Martin

Along the coast from Ceuta to a point 4 miles south of the town of Rio Martin hilly and mountainous terrain is fringed by a low coastal plain. In most places this feature is 1/2 to 1 mile wide but in places it extends inland 2 to 6 miles in filled estuaries. The largest of these is at Rio Martin.

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Much of the land in these filled estuaries is swampy

but the beach is well-drained. On it are located the coastal highway and, as far as Cabo Negro, (14 miles south of Ceuta) the railroad from Ceuta to Tetuan. Only at Cabo Negro is the shore steep and rocky.

In the stretch of coast from Ceuta to the point 4 miles below Rio Martin there are several landing beaches. Between Ceuta and Punta del Canto there is a sandy beach about 800 yards long immediately south of the Arroyo de las Bombas. Approaches are clear and the 6 fathom depth-contour is about 800 yards offshore. The gradient of the beach is about 2 1/8 feet per 100 and access to the interior may be attained by climbing a steep bank. Vehicles probably could not surmount this obstacle.

Between Punta del Canto and Punta Restinga there are two beaches where landings might be effected on a fairly large scale. One of these, located just south of Punta del Canto, is a sandy beach about 1300 yards long and clear of offlying rocks except at the southern limit. Highway and railroad lie immediately inland and the adjacent land is level. These conditions together with distance from fortifications recommend this beach as the most favorable landing site near Ceuta.

Between Roquero de las Tres Piedras and Punta Restinga nearly a mile of sandy beach extends north from the mouth of the Rio Negrón. As this river flows behind the whole length of the beach, movement directly

inland would be highly difficult. However, the highway leading south from Ceuta follows this beach and the railroad lies near the shore northward from the north end of the beach.

From the mouth of Rio Smir to Cabo Negro there are nearly 3 miles of beach clear of off-lying dangers. The northern half of the beach is backed by land subject to flooding but in the south the land rises to low hills. Highway and railroad lie along the inner side of the beach.

Rio Martin, on the north bank of the river of the same name, is the old port for Tetuan, which lies 6 miles west-southwest. For a long time the port was neglected. However, recent reports (1942) state that a submarine base is being constructed with a reinforced-concrete quay which will have a minimum depth of 28 feet alongside and that the width of the river (channel?) "after dredging" will be 120 yards.

The best landing appears to be on a beach extending about 1 mile north of the mouth of Rio Martin. Access to the interior would be along the beach to the Rio Martin-Tetuan road. Vehicles which could not be landed on a slope of 1 to 60 would have to be disembarked at Playa de Axla, about 3 miles south of town. The route to the inland would be via the Wad Lau-Tetuan road which skirts the Playa de Axla and turns inland at the mouth of Rio Allila.

The sea approaches of the Rio Martin area are clear except for foul ground starting 1 1/2 miles south of town and extending about 1 mile southward.

Four Miles South of Rio Martin to Punta de Los Frailes

Along the coast from a point 4 miles south of Rio Martin to Punta de Los Frailes the mountains rise steeply from the sea. Filled estuaries are smaller than in the preceding reach of coast and beaches are narrow and are interrupted by bold headlands. Several of the beaches appear suitable for landings but they lack transportation routes other than mule paths leading to the interior. The following landing places may be listed:

1. Ensenada de los Alamos, 15 1/2 miles southeast of Punta Adelau. Has a beach nearly 2 miles long.
2. Two sandy coves 6 1/4 and 4 miles respectively west of Punta de Pescadores. Might prove suitable for small scale landings.
3. A beach more than 1 mile long borders the Ensenada de Pescadores.
4. A beach is located just west of Puerto Capaz and Wad Lau.
5. Two small bays, Ensenada de Traidores and Ensenada de Mostaza are located at the mouths of the rivers of the same names.
6. Puerto de Iris (4° 22' W.), a small bay with 2 beaches divided by a rocky spit. The best landing place would appear to be in the eastern part of the bay about 200 yards on either side of the reef.
7. Ensenada de Alcala, about 2 miles east of Islade Iris, is a small bay at the mouth of the Wad Bou Frah. It has a beach about 300 yards long bounded by high cliffs. Exit, as at the other beaches on this stretch of coast, is by mule path.

8. Playa del Bades, a beach in the Ensenada de Velez de la Gomera, affords a good landing place but has inadequate transportation to the interior.
9. Near Punta Busicur, about 5 miles west of Punta de los Frailes, there is a beach with fairly deep water near shore. It has no protection against landing operations.
10. Near Punta de los Frailes are the beaches on which the Spanish landed in September 1925, named collectively Playa Cebadilla. They appear most unsuitable for landing operations. The beaches are very narrow, fronted by rocks and backed by sloping cliffs 50 to 100 feet high.

Punta de los Frailes to Cabo Tres Forcas

Eastward from Punta de los Frailes to Melilla the coast is mountainous but includes two areas of low-land, each of which has 6 to 7 miles of beach. The largest plain, located about 3 miles east of Villa Sanjurjo (Villa Alhucomas) forms the south shore of the Bahia de Alhucomas. It extends inland about 7 miles up the valley of the Nekor River. The other plain situated about 2 1/2 miles southwest of Punta Negri extends only 2 miles inland. These plains communicate with the interior by means of secondary roads which run through river valleys.

About 2 miles south of Villa Sanjurjo at Punta Espalmadero is a small sandy beach about 400 yards long and apparently steep-to. A track follows a stream about 1000 yards to the main road.

Starting opposite the Isla de Tierra about 2 3/4 miles south of Villa Sanjurjo a sand beach extends eastward along the south side of the Bahiade Alhucomas for

7 miles. This beach, various parts of which go by different names, has slopes of 1 in 60 to 1 in 100 and appears to be wide throughout. The Playa Sfiha, that part of the beach opposite Penon de Alhucemas, a rocky island on which is located an old Spanish fortress, has the best communication with the interior. The old Riff Capital Axdir is close behind this beach and there are good tracks leading to the main road (Villa Sanjurjo - Melilla) slightly more than 2000 yards away. However, a special communication of November 1942 states that there are coastal and antiaircraft batteries both on Peñon de Alhucemas and on a mountain back of Villa Sanjurjo.

The same source of information states that the Playa del Harch, the part of the beach east of Oued Nkar has no local protection and might therefore be utilized as a landing place. However, the route inland lies for 4000 yards across cultivated land which may be flooded in winter, then follows a track which fords the river and eventually joins the main road. A further disadvantage lies in the fact that if the armament of Penon de Alhucemas, six miles to the west, includes heavy artillery the beach may be exposed to bombardment.

The central part of the beach, Playa de Suani, located between Oued Nkar and Oued Guis, is subject to the same disadvantages as Playa del Harch except

that it is closer to the batteries.

East of the Bahia de Alhucemas are a number of isolated beaches which have no road connections.

The Playa de Sidi Dris, a 2 mile sand beach just west of Wad Amekram (Bu Azzum or El Kebir), has access to the interior over poor and indirect roads through hilly and mountainous country.

Three and one half miles farther east is a belt conveyor for loading iron ore into ships from the top of the cliffs. Beside it is a landing place at which a very limited landing might be made. The track to the interior is rough and indirect.

Close to Ras Afraut (Afrau) 1 1/2 miles east of Sidi Amar U Musa is a small cove with a sandy beach at its head. A steep track leads to a secondary road and ultimately to the highway at Dar Druis. Landing appears to be practicable on this beach although no detailed information is available.

Between Punta Betoya and Punta Garet is a long sandy bight, the Ensenada de Azanen, which fronts an extensive well-populated, cultivated plain nearly 4 miles deep. The beach which is backed in its north-eastern part by conspicuous white sand dunes appears a likely landing place for an attack on Melilla or Nador although exact surveys are lacking. From Sammar, a large village 2600 yards behind the beach, a third-class road connecting the landing place to Melilla runs parallel to the beach.

Between Punta Negri and Cabo Tres Forcas there are three beaches which offer possibilities of scramble-landings although unsuitable for vehicles or heavy equipment. Their seaward approaches are clear.

The first near the Marbut of Sidi Messaud might be useful in cutting the Sammar-Melilla road which lies very close to the shore.

A second beach at Calas de los Pajaros has a steep zigzag track up the cliff to the terminus of a good road which leads to Melilla about 12 miles south-east.

A third landing place, less than a mile north of Calas de los Pajaros at Calas Tramontana has two small beaches. Steep tracks over the hills lead to the good road at Calas de los Pajaros.

On the high coast between Cabo Tres Forcas and Melilla there are three beaches of moderate size. The northernmost, at Marsael Heddi adjoins the good road from Cabo Tres Forcas to Melilla. The landing is about 11 miles from the town by road.

Cala Teldent about 5 1/2 miles due north of Melilla appears to have no road connections but Cala Trifa 2 1/2 miles south of it has a rough track leading to the main road slightly more than 1 mile inland.

Melilla to the Eastern Border

From Melilla to the eastern boundary the coastal lowlands are extensive. For 16 miles southeast of Melilla the coast is bordered by a broad crescent-

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shaped lagoon (Mar Chica) which is cut off from the sea by a low bar except for a narrow passage at the northern end. A lowland 5 to 8 miles wide extends south from the lagoon for 14 miles then west 41 miles. Through it runs the main highway from Melilla to Ceuta and a feeder railroad from Melilla to the western end of the lowland. East of the lagoon the coastal plain narrows to one mile and slopes seaward with an average slope of 4 feet per hundred. Six miles southwest of Cabo de Agua the plain widens to 4 miles and retains this width to the eastern frontier at Rio Muluya.

South of Melilla a sandy beach extends 3000 feet southeast as a sandy spit 400 to 800 yards wide. The route landward would be north along the beach to the road skirting the western part of Mar Chica.

From the north entrance to Mar Chica the coast continues southeast for 12 miles to Ras Quiviana as a narrow spit 400 to 2000 yards wide. Almost the entire spit is sand beach with some dunes but there is a rock outcrop known as Restinga,

Landing should be practicable on the beach northwest of Restinga. However, unless the northern entrance to Mar Chica were bridged the only way to land would lie southeast along the beach. The land at the southeastern end appears to be very marshy and has poor roads leading to the interior. Cuts through the bar to Mar Chica were begun at 2 points but probably have not been completed.

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The north entrance to Mar Chica is believed to be about 6 feet deep although some reports state that ports are 20 feet deep. Its importance as an obstacle is unknown.

From Ras Quiviana to Rio Muluya (Spanish frontier) the coast is virtually unsurveyed but landings would appear to be practicable on a beach 1500 yards long beginning about 1200 yards east of Ras Quiviana. However the sand may be too soft for best results in landing. Two parallel tracks lead inland.

East of this beach cliffs 50 to 65 feet high skirt the coast to Cabo del Agua 14 miles east. It is fronted by many small beaches and has many small streams running into the sea.

Playa el Abid and Playa de Bufadis, the largest of the beaches, appear to have no offlying dangers. Routes inland for both would lie up the cliffs and across sloping cultivated land to the El Arbaa-Cabo del Agua road 2500 yards inland.

From the base of the cliffs at Cabo del Agua a shelving sandy beach trends east-northeast to Rio Muluya 3 1/2 miles away and beyond to Wad Kiss the frontier of Morocco and Algeria.

The landing of vehicles on this beach would be very difficult but limited landings could be made at a small landing place (concrete?) on the east side of Cabo del Agua as well as on the beach near it.

References

- Strategic Engineering Study No. 15, Volume 9B, Beaches of the Atlantic coast (French Morocco), Beach Erosion Board, Corps of Engineers, U.S. Army. September 1942.
- I.S.I.S. Report on North-West Africa, part V(A), Mediterranean coast of Morocco, Punta Malabata to Wad Kiss. October 1942. C.B. 4096E.
- C.S.S. Report on Morocco. Vol. 1, August 1942.
- H.O. 151, Mediterranean Pilot, Vol. 1, 1930.
- Africa Pilot, part 1, British Admiralty, 1939.
- Topographic maps of Spanish Morocco, No. 4239, 1:50,000, British War Office, Geographic Section, General Staff, Published 1941, reproduced by U.S. Army Map Service, 1942.
- Index of Aerial photographs, Spanish Morocco, U.S. War Department, Corps of Engineers. 1942.

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STRATEGIC ASPECTS OF THE CLIMATE
OF
SPANISH MOROCCO AND THE TANGIER ZONE

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General Characteristics of Precipitation

Winter is the worst time of year for military operations in Spanish Morocco, since that is the rainy season. Roads and soil are frequently converted into deep mud, rivers become roaring torrents or flood their valley floors, and snows or mud close the roads leading south into French Morocco across the Rif Mountains.

To get most favorable operating weather, invasion forces would have to wait until the end of the rainy season. The rainy season lasts through May on the average, though it may end as much as a month earlier or later in a particular year.

For operations planned for winter, weather is worst at the height of the rainy season. In western Morocco, on the average, November is the wettest month, while in the east December is usually the wettest, though the time varies greatly from year to year, and any month from October to March may have the heaviest rainfall in any given year.

The rainfall, though ordinarily spread out over 10 or 12 days a month, is sometimes concentrated in heavy downpours, that may bring from 1 1/2 to 5 inches of rain in a single day.

Regional Differences in RainfallA. East Coast

From nearly every viewpoint, eastern Spanish

Morocco is climatically much more suitable for winter invasion than western Morocco. The north central coast is intermediate in the character of its winter, but because of its isolation from the south by the Rif Mountain barrier it is not of as critical strategic significance as the east and west coast areas.

Climatically, the best base for penetration southward from the Mediterranean coast is between Melilla in Spanish Morocco and Nemours in Algeria. Here a semi-arid tongue of climate extends northward from the interior of French Morocco to the seacoast. The rainfall is only 10 to 20 inches per winter: 1/3 to 1/2 as much as in western Morocco. December and January get only 2 inches of rain per month, and 4 out of 5 days receive no precipitation. Even on dirt roads motor transport should seldom have difficulty, though possibly once a winter as much as 1 to 2 inches of rain may fall in a single day near the eastern extremity of Spanish Morocco, and as much as 3 or 4 inches from Melilla westward.

B. North Central Coast

From Melilla to Villa Alhucemas rainfall remains below 20 inches a year: low enough to permit fairly free movement on the ground. West of Villa Alhucemas rainfall steadily rises, to about 30 inches near Tetuan.

The melting of snow on the Rif Mountains in spring, starting about April, often obstructs movement

by causing floods in the numerous stream channels that head in the mountains.

C. Western Morocco

Land operations in the western lowlands of Spanish Morocco are subject to frequent and serious interruption during the winter rain season. In the entire area between the Atlantic coast and the Rif Mountains, heavy rainfall sets in early in the season, usually November, with a mean rainfall of between 4 and 5 inches for the month. In December and January, rainfall in a single day may amount to as much as 2 inches in the southwestern part of the lowland, and 4 or 5 inches near Tangier and in the Rif Mountains. In the entire winter, 30 to 40 inches of rainfall may be expected.

Much of the ground becomes impassable when wet. The clay soils, which are common inland from the immediate coast, become particularly sticky and unmanageable. Even in the areas of sandier soil, the floods of rivers and the blockade of drainage by sand dunes at the shore result in the development of numerous temporary lagoons and marshes. Even on days when rain does not fall (usually more than half the days in December and January have no rainfall), the adverse conditions of mud and swamp persist much of the time. Between rains, the moist air and heavy dews contribute to the general dampness of the region.

Cloud and Fog

The rainstorms of Spanish Morocco are accompanied by a mantle of cloud that periodically hampers high-level aerial bombing and observation. Ceilings are generally high enough (2000 to 3000 feet) so that take-off and landing operations are possible most of the time.

Cloudiness, like rainfall, favors attacks in eastern Spanish Morocco rather than western. Whereas in the west cloudiness in winter averages about 50%, in the east it is between 30 and 40%.

Dense fog is rare in Spanish Morocco, particularly in the dry eastern part. Along the Atlantic coast there are 2 days per month with fog in December and January, while in the vicinity of Melilla there is less than 1 in the entire winter. Light mist, however, is common, and may be expected on about 2 out of 3 days at Melilla.

Visibility

Visibility is satisfactory throughout Spanish Morocco most of the time; very poor visibility is seldom encountered. On the other hand, very good visibility is not the rule in all portions of the area. Visibility less than 1/2 mile is almost unknown. Visibility between 1/2 and 2 nautical miles occurs slightly more than once a month along the Atlantic coast, less than once a month on the Mediterranean coast in eastern Morocco.

In the highest category of visibility--more than 10 nautical miles--the Atlantic coast is much superior to the Mediterranean coast of eastern Morocco. Both coasts, however, have visibility satisfactory for air operations most of the time. At Tangier, more than half the days of winter have visibility exceeding 10 miles and most of the rest of the days between 5 and 10 miles. At Melilla, on the average, only 1 day in the entire winter has visibility better than 10 miles, though there are 17 days a month with visibility of between 5 and 10 miles, 12 days between 2 and 5 miles.

Icing

With mean surface temperature of about 55° F. and mean minimum of about 45° F. in the coldest month along the coast, icing is not a serious factor for approaching planes below elevations of 6000 to 8000 feet. Air operations inland from the coast, especially over the mountains, would encounter conditions favorable for icing at somewhat lower levels.

Wind

In the winter, any invading force from the north would encounter cross-winds from west or east most of the time. In the east-west corridor between Spanish Morocco and southern Spain the east and west winds are particularly strong and persistent. In the western part of the corridor 2 or 3 gales per month are to be expected in winter. In the Melilla-Nemours area gales

are less frequent, and about 4 calm days per month are likely, compared with less than 2 calm days per month farther west.

Along the Atlantic coast, the prevailing winter winds are the "Vendavales": strong winds from the south-west, bringing heavy rainfall and clouds.

In all localities, winds may blow from nearly any direction in the course of the storms that move in from the Atlantic at the rate of about 2 per week in winter. It is possible that invasion forces would plan to take advantage of favorable winds connected with the storms.

Upper air winds are prevailing from the west, with a pronounced northwesterly component, particularly at 10000 feet. The easterly component, so marked in surface winds, is entirely lacking at the higher levels.

Sea and Swell

Conditions of the sea are favorable for beach landing operations at least two-thirds of the time in Spanish Morocco. Broad regional differences do not appear to be great in this respect, though conditions of exposure and sea bottom may make big differences between specific beaches.

At Tangier, there is calm or slight sea on the average 58 days during winter (December to February), and rough sea on 19. At Melilla, the figures are respectively 65 and 12.

References

- Bentley, Wm. C. (Military Attache, Tangier, Morocco).
Meteorological conditions in Spanish Protectorate Zone of Morocco up to the year 1940.
(Report to Military Intelligence Division, War Dept., General Staff, based upon Spanish magazine "Mauretania", Tangier.)
- Bernard, Augustin. Afrique septentrionale et occidentale. Part 1. Generalities, Afrique du Nord. Geographic Universelle, Vol. II. Paris, 1937.
- H.O. 134. East Atlantic Pilot. 1928.
- I.S.I.S. Report on Tangier, Spanish and French Morocco. CB 4096E. Nov., 1940.
- Meteorological Office (Navy Division), Air Ministry
London. Weather of the Mediterranean. Vol. 3, 1936.
- Philippsen, Alfred. Das Mittelmeergebiet. Leipzig and Berlin, 1922.
- U.S. Weather Bureau Climatic Records.

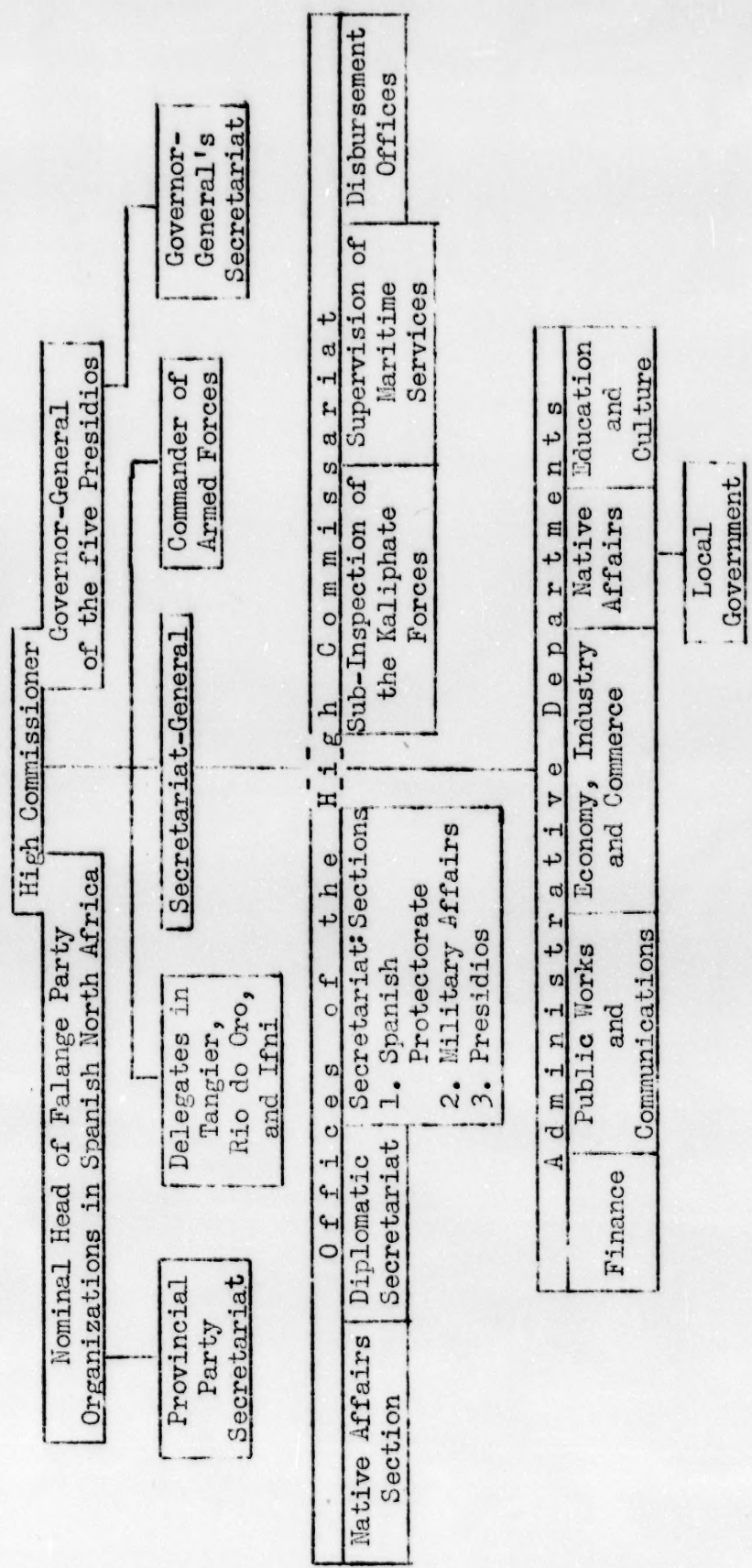
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GOVERNMENT AND POLITICS
OF
SPANISH MOROCCO AND TANGIER

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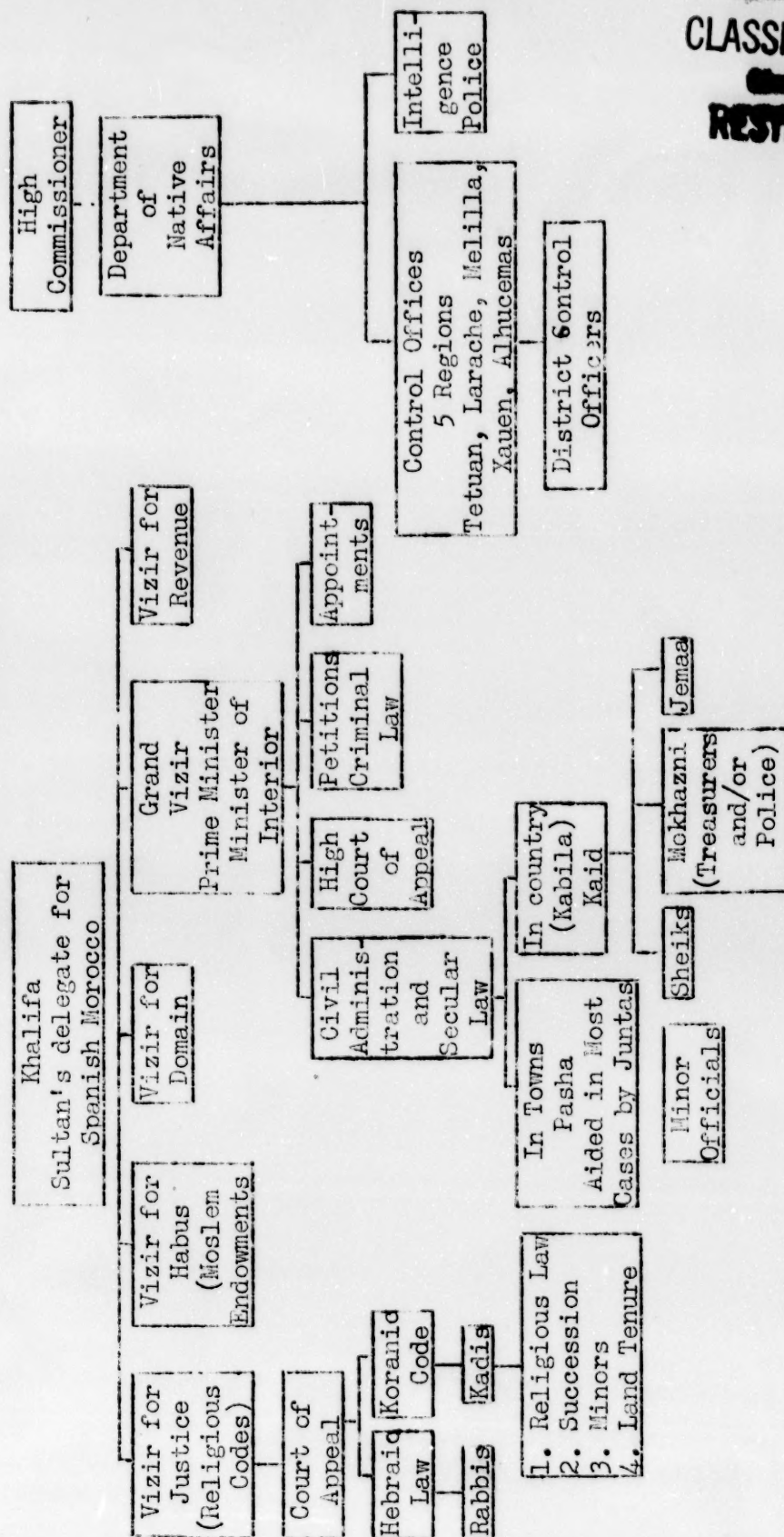
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Government of Spanish Morocco



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Government

There are three degrees of administrative control in the Spanish sphere of North Africa.

1. The five presidios of Ceuta, Melilla, Alhucemas Peñon de Velez de la Gomera, and the Chafarinas Islands are administered as integral parts of Metropolitan Spain, although subject in some respects to the High Commissioner of Spanish Morocco.

2. The Protectorate of Spanish Morocco, although nominally part of the Sherifian Empire of the Sultan of Morocco, (who is represented in the Spanish Zone by a Khalifa), is in fact administered through a Spanish government headed by a High Commissioner at Tetuan.

3. The International City of Tangier, also in theory subject to the Sultan (represented there until recently by a Mendoub), is at present under de facto control of Spain. The High Commissioner of Spanish Morocco is represented in Tangier by a Delegate. The city has virtually lost its character as an international zone, although the interested powers have been able to retain certain commercial rights.

I. The Five Presidios.

The five presidios (Ceuta, Melilla, Alhucemas, Peñon de Velez de la Gomera, and the Chafarinas Islands) have never been part of the Protectorate. They were acquired by Spain before 1912, and have been governed as an integral part of metropolitan Spain, with their own Governors and local

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administrations. Penon de Velez is administratively dependent on Malaga.¹ Recently, however, the High Commissioner at Tetuan has become Governor-General of Ceuta and Melilla,² and it is probable that he now holds the same position in the other three presidios. Information on how his authority is exercised or delegated in these five areas is not available. Since all five, and particularly Ceuta and Melilla, are geographically and economically a part of the Protectorate, it is probable that they will be administratively integrated into it to an increasing extent.

II. The Protectorate.

The Khalifate.

The nominal ruler of Spanish Morocco is the Sultan, who appoints a Khalifa to represent him at Tetuan. In fact, however, neither Sultan nor Khalifa possess any real power. The Sultan chooses the Khalifa from two names presented to him by the Spanish authorities; thereafter the Khalifa is virtually independent of the Sherifian Government at Rabat. Although he is nominally the source of legislation issued in the form of decrees (dahirs), these and every other official action he takes must have the approval of the Spanish High Commissioners, and his native subordinates are likewise limited by Spanish officials.³

¹C.B. 506, N.I.D., Morocco, December 1941, I, 8; II (not yet published).

²Mundo, III (January 4, 1942), 6-9.

³C.B. 4096-E, ISIS, Report on Northwest Africa, May 1942, Part I, p. 7.

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The Khalifa (at present Sidi Mulay Hassan Ben el Mehedi) maintains a court at Tetuan and is treated with respect by Spaniards and natives alike. As the Sultan's representative he remains the central figure in the religious lives of the natives and to a limited extent the defender of cherished social and religious rights against Europeanization. To the Spaniards, as to the French in their zone, the Makhzen or native government has represented a means of securing a greater degree of order and native loyalty than would otherwise have been possible.

The Khalifa's cabinet corresponds in miniature to that of the Sultan in French Morocco:⁴

1. A Grand Vizier, responsible in general for native administrative activities, including secular native justice; prepares draft dahirs and issues viziriel decrees;
2. A Minister of Justice, who supervises administration of the Chraa (Koranic) justice and hears appeals from the judgments of the local native judges; the Minister is assisted by a Council of Appeals;
3. A Minister of Habus (religious lands) who supervises Moslem religious property, worship and education;
4. A Minister of state real estate;
5. A Minister of state revenues.

Each of these ministers heads a department, subject to the control of the Spanish authorities.

⁴E. Coidan and J. Desparmet, "La zone espagnole du Maroc en 1937", Afrique française, V. 48, 232-240, 268-271.
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The High Commissariat.

Superimposed upon this system of nominal authority is the Spanish High Commissariat, headed by the High Commissioner, who since the November 1941 reorganization⁵ has been directly responsible to the Prime Minister. He is no longer responsible to the Morocco and Colonies Directory in the Ministry of Foreign Affairs, as formerly.

The High Commissioner of Spain in Morocco (as present General Luis Orgaz y Yoldi) fulfills several executive functions. He is the supreme local authority in Spanish Morocco, and also in Spanish Ifni, Rio de Oro, and Tangier, where he is represented by delegates. He has recently received a certain amount of authority over the five presidios (see above). He is the nominal head of all the Falange party organizations in Spanish North Africa. The present High Commissioner (General Orgaz), is also commander of the armed forces in all the territories under his control. While this arrangement is not usual, the commander of the forces is always responsible to the High Commissioner.⁶

General administration is supervised by a Secretary-General. Until recently the Secretary-General performed the High Commissioner's duties in his absence, but the recent

⁵For the 1941 reorganization, see Mundo, III (January 4, 1942) 6-9; also State Department Reports from Tangier, January 1942 (OSS Accessions 21577, 21644, 21649).

⁶State Department report from Tangier, January 3, 1942, (OSS Accession 21577).

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reorganization provides that the senior Spanish general in Morocco shall do so.⁷

Administrative Services.

As reorganized in 1941, the administrative services were the following:⁸

A. Executive Offices (directly under the High Commissioner):

1. Secretariat: 3 sections: a) Protectorate affairs, b) military affairs, c) affairs of the sovereign territories (Ceuta, Melilla, etc.)

2. Diplomatic Secretariat.

3. Sub-inspection of the Khalifate Forces.

4. Supervision of Maritime Affairs.

5. Disbursing Office.

6. Native Affairs Division: matters dealing with problems of supervision, policy, information, and security.

B. The Secretariat-General. Inspection and supervision of services. Technical administrative advice. Administrative secretariat; archives. Personnel, statistics and general affairs sections.

Under the Secretary-General are the following departments (delegaciones).

C. Finance. Tax collection and rents on properties of the Spanish State. Disbursements, loans, revenues, supervision of taxes.

⁷State Department Report from Tangier, January 3, 1942, (OSS Accession 21577).

⁸Mundo, cited, p. 8.

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D. Economy, Industry, and Commerce. a) Central section, b) Commerce section, c) Accounts and money section, d) Development section (agriculture, forests, hydraulics, animal husbandry), e) Mines, f) Meteorological service, g) Industrial inspection section, h) Tourism.

E. Public Works and Communications. Public works, official construction, P.T.T. and air service, automobile travel (public roads).

F. Education and Culture. Public instruction (primary, intermediate, advanced, specialized. Culture. Physical education. Fine arts and native arts.

G. Native Affairs. General supervision of native administration. Public order. Investigation. Control of native constabulary. Inspection of municipal affairs. Native collective enterprises. Jewish communities. Social action: public sanitation and hygiene; charity; penal facilities; widows', orphans', and native veterans' pensions

No central deliberative assembly exists in the Spanish Zone.

Local Government.

Local government is largely in the hands of native officials who belong to the civil service and are paid with protectorate funds. Most native officials are supervised by some Spanish counterpart.⁹

The basic local unit in the Protectorate is the

⁹NID, Morocco, cited, II (not yet published).

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Kabila (usually a group of tribes), of which there are about sixty. The officials of the Kabila are: 1) the caid or chief, who has under him 2) a khalifa or deputy, 3) meknazni or treasurers, 4) sheikhs, who represent him among the smaller tribal units, and 5) the Cadi, or Koranic judge, and his assistant, the Aun. The Caid may perform the judicial function himself in rural districts.

In remote districts, the only local authority may be that of the head of the jemaa, or tribal assembly.¹⁰

The principal cities are placed under the nominal authority of a pasha with administrative, police, and judicial powers, assisted by an appointive Junta of Municipal Services.¹¹ Spanish authorities are usually in actual charge.

Control over these native institutions is exercised by the Spaniards through a system of superimposed local jurisdictions. The Protectorate is divided into five regions; each is supervised by a controller or 'interventor' normally a military official. The regions and their headquarters are as follows:¹²

Region Occidental	Larache
Djebala	Tetuan
Ghomara	Xauen
Rif	Alhucenas
Region Oriental	Melilla

¹⁰ISIS, Northwest Africa, cited, p. 7.

¹¹NID, Morocco, cited II.

¹²Ibid.

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The controllers have subordinates in each of the Kabilas and towns to supervise the activities of the caids and pashas.

The whole Spanish control system is coordinated by the Department of Native Affairs of the High Commissariat, which also has a special corps of observers to investigate local conditions.¹³

Justice.

Koranic justice, which relates to matters of inheritance, personal property, etc., is administered locally by the cadis; appeal to the Minister of Justice's Council of Appeal. There is little Spanish interference with Koranic or rabbinical courts, but the Department of Native Affairs supervises secular justice, which is meted out by the local civil authorities.¹⁴

The Spanish judicial system operates under five legal codes set up in 1912. At the base of the system are five Tribunals of the Peace (at Nador, Tetuan, Larache, Arcila, and El Ksar el Kebir). Above these are three courts of first instance (at Nador, Tetuan, and Larache). The Audiencia, or Court of Appeal, for the Protectorate is at Tetuan, but final appeal may be made to Madrid.¹⁵

¹³ Mundo, cited, p. 8; ISIS, Northwest Africa, I, 7; NID, Morocco, II.

¹⁴ NID, Morocco, cited, I, p. 10.

¹⁵ Ibid., II; ISIS, Northwest Africa, I, 7.

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Police forces consist of a civil force of regular police, aided by the investigators already mentioned, and a gendarmerie available for emergencies. These forces are under the orders of the local Spanish authorities and ultimately of the Department of Native Affairs.

III. Tangier¹⁶

Before 1940, Tangier was an international city, with institutions on which the interested powers were represented. Following the fall of France in June of 1940, however, Spanish troops occupied the Zone. Assurances were given to the powers that their rights would not be endangered but one by one the Committee of Control, the Legislative Assembly, the Mixed Bureau of Information, and the international police force were abolished or replaced by Spanish-controlled bodies. The Sultan's position also suffered: the Mendoub, his representative in the Zone, was removed from office; the Mendoubia was returned to the Germans, whose consulate it had been previous to 1914. The Mendoub's functions were abolished and a pasha put in his place, with power no greater than that of the pasha of any other Moroccan city. Furthermore the pasha was appointed by and accountable to the Khalifa at Tetuan, not to the Sultan, as the Mendoub had been.

Great Britain took the lead in protesting to Spain,

¹⁶NID, Morocco, I, 251-255; ISIS, Northwest Africa, I, 4-5.

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and managed to preserve most of her commercial rights. But Tangier was no longer under international administration; it became virtually an integral part of Spanish Morocco. It is at present governed by the Delegate of the High Commissioner in Tangier, General D. Jenaro de Uriarte y Arriolo, assisted by a city council. It has been coordinated with the administrative and judicial institutions of Spanish Morocco. The only international institution which seems to be still in existence is the Mixed Tribunal. In early 1941 the Spanish government promised Britain that if they found it necessary to abolish this body, the pre-existing Consular Court would be established and fully recognized.

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Politics

[Biographical material on most of the individuals and on the leaders of the main political groups mentioned herein is contained in the "Who's Who" section. Native political activities and parties are described in the section entitled "Native Life and People."]

The political situation is dominated by the High Commissioner, General Orgaz. He is, of course, responsible to General Franco, but distance and a strong personality combine to give him a position of considerable independence. He is generally considered to be a typical Spanish military man, anti-democratic, strongly nationalist, but hostile to Serrano Suñer's Falange party, although he is its nominal chief in Spanish Morocco.¹

The reorganization of November 1941, which centralized greater powers in the High Commissioner's hands and freed him from responsibility to the Spanish Foreign Office, has been interpreted as a personal triumph for General Orgaz.²

These facts do not justify the conclusion that he is pro-Ally, but he would probably oppose a policy of voluntary co-operation with the Axis.

The men surrounding him in the High Commissariat are for the most part personal friends who represent his point of view. On the other hand Señor Tomas Garcia Figueras, formerly Secretary General and usually considered to be pro-Axis, has been sidetracked into a less important position.³

¹Mundo, III, January 4, 1942, pp. 6-9.

²State Dept. report from Tangier, Jan. 3, 1942 (OSS Acc. #21577).

³Ibid; also OSS report #7661, Oct. 27, 1942.

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The Falange party has a considerable support in Spanish Morocco, which has been a Franco stronghold since the beginning of the Spanish Civil War. In Tangier where the Falangistas are in most complete control a party card is needed to obtain state jobs or contracts.¹ But as has been indicated, the Army men who hold the key positions are for the most part notoriously anti-Falange. This group is probably neither pro-Axis nor pro-United Nations, but outstandingly pro-Spanish. The Falangistas, on the other hand, are likely to be pro-Axis.

Pro-Axis sentiment in Spanish Morocco has been sponsored and organized by numerous German and Italian agents who have carried on their activities since 1936 and more openly since the fall of France. Official censorship has tended to be pro-Axis. The Khalifa himself is considered to be pro-German. Pro-Axis sentiments have been expressed in the newspapers of the Arab nationalist parties, which have imitated Fascist techniques in their local activities. It appears probable, however, that the nationalists are not genuinely friendly to Germany and Italy but have hoped until recently that their movement might gain by a reshuffle in the political balance of Europe.²

Counterbalancing the pro-Axis strength are various groups known to be friendly to the United Nations. These include the Jewish refugees, much of the foreign population of Tangier, some of the ex-Loyalists, and a number of native

¹Colwyn Bechet, "Liberty Comes to Tangier," World Review, Feb. 1942, pp. 24-28.

²C.B. 4096E, ISIS, Report on North-west Africa, I, 9.

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leaders of declared pro-Ally sympathies. Probably the natives, where they have any political sentiments, tend to prefer the United Nations' cause to that of the Axis.

A third category exists, which is characterized not by its attitude toward the United Nations or the Axis, but by its hostility to the Spanish authorities. This group includes (1) the Rifs, who would like to see the Spaniards driven out of Morocco and if armed would probably rebel against Spanish authority,¹ and (2) the former Republicans (of whom there are reported to be a considerable number in forced labor battalions), whose dominant feeling is one of hatred for the Franco government. These groups are interested in the war only insofar as it affects their immediate aspirations. This attitude also represents the point of view of most of the Arab nationalists.

The foreign policy of Spanish Morocco is conducted not from Tetuan but from Madrid; the power of discipline and removal which the central government can exercise is normally enough to keep the local authorities inline. General Orgas, who has already shown signs of independence and decisiveness, is in a position where he can make a number of his own important decisions, but it is probable that they will follow the general lines of Madrid policy.

This is especially true since the lines which Spanish policy can take are narrowly circumscribed by the vulnerability of her position. Spain's aspirations have long

¹Report of Colonel Solborg, July 28, 1942(OSS Acc.#19441).

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been to have her North African empire extend from Rio de Oro on the Atlantic to (and including) the city of Oran on the Mediterranean.¹ Until recently it seemed that an attempt to realize this aspiration might occur at almost any time. Now that the forces of the United Nations have occupied the surrounding French North African territory and control the western Mediterranean, the Spaniards are not likely to make such an attempt on their own initiative. On the other hand, the Germans across the Pyrenees are in a position to induce the Spaniards to make a flank attack on the American forces in Morocco, guaranteeing to let them keep what they capture.

Such an attack would by no means be certain to fail, as the Spanish forces in Morocco are considerable, and the Spaniards might well feel that the possibility of Germany's allowing them to keep their North African empire, and the certain consequences of non-compliance, would justify the risks.

The Arab nationalist parties are discussed elsewhere. Under Col. Beigbeder and until recently, these parties have been given considerable freedom by the Spaniards, in return for which they supported Franco against the Loyalists in the Civil War, were useful in keeping anti-French sentiment alive, and caused little trouble for the local authorities. Recently, however, General Orgaz has adopted a policy apparently aimed at their ultimate extermination. Following the protest of the French Consul against the anti-French outbursts, he has found it useful to suspend two of the most important native papers, and has taken other steps against the

¹State Department report from Tangier, June 13, 1942 (OSS Acc. #21568).

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native movements.¹ The result has been a weakening of his position; even the Khalifa has been so incensed that he went to Spain to protest to Generalissimo Franco. Latest reports indicate that General Orgaz is backing down and attempting to effect a reconciliation with the native leaders. This failure, and his tendency to exhibit signs of independence, have led to reports that General Orgaz's days as High Commissioner are numbered.²

¹State Department report from Tangier, May 26, 1942 (OSS Acc. #21580)

²Military Attache Tangier report, September 17, 1942 (OSS Acc. #22706); also M.A. Tangier Report, Sept. 17, 1942: Major Bernardioni's observations, (OSS Acc. #22712).

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NATIVE LIFE AND PEOPLE
OF
SPANISH MOROCCO AND THE TANGIER ZONE

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I. Races.

In their racial composition the Moslems of Spanish Morocco show a preponderance of the old, aboriginal elements of Northwest Africa. The Arab invasions, which strongly affected some parts of French Morocco, contributed far less to the population of the Spanish Zone, while Negro slaves were likewise not as common here as further south. The largest foreign increments are probably European, brought in by Moslem refugees from Spain between the 14th and 16th centuries, by Spanish Jews, and by Christian renegades and captives. Tangier, and to some extent Tetuan, stand apart as cosmopolitan towns, where all the races of the Mediterranean have intermingled.

Spanish Morocco has no race problem, since the Negroes have been well assimilated by Moslem society, and since Jews and foreigners are distinguished by cultural rather than by physical traits.

II. Languages.

A. General.

A difference in language, however, divides the Moslem population into two antagonistic groups--the Arabs and the Berbers. Berber was the aboriginal speech of all of North Africa west of Egypt. It belongs to the Hamitic family, along with ancient Egyptian and many languages in northeastern Africa. Arabic, the most widespread Semitic language, entered North Africa with the Moslem conquest in

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the 7th century, and has since replaced Berber in most of the area. Though Berber has borrowed many Arabic words, and North African Arabic has been somewhat influenced by Berber phonetics, the two languages remain distinct. People who speak Arabic as their native tongue should be called Arabs, regardless of their ancestry; while the name "Berber" should be reserved for those of Berber speech.

B. Berber Languages.

Berber languages hold throughout the eastern part of the colony, from the Penon de Velez on the coast to the mouth of the Muluwiya River, and south to the border of the French Zone. In the extreme east, the tribe of the Uled Setut forms an enclave of Arabic speech; while in the west the Berber-speaking Benu Bu Zra and Beni Mansur, inland from Tiguisas, are separated from the main Berber bloc by several tribes that speak Arabic. Berber is essentially a spoken language; it has no alphabet of its own.

Berber dialects are divided into two main groups, each of which is unintelligible to the speakers of the other. The Rifi-Ghomaran dialects occupy most of the Rif and a small area extending inland from the coast around Tiguisas. Dialects of the second group, the Senhaja Sghir or "Little Senhaja", are concentrated in the southwestern corner of the Rifian Berber bloc, nowhere touching the coast, and are closely related to the Berber and Shilha dialects of French Morocco. On the basis of dialect, the Berber communities of Spanish Morocco may be classified as follows:

1. Rifi: Kebdana, Beni Bu Yahyi, Metalsa, Beni Said, Beni Ulishk, Tafersit, Beni Tuzin, Tamsaman, Beni Urriaghel, Beni Anart, Bokoya, Beni Itteft, Mestassa, Mtiwa, and Galiya. The Galiya include the Mazuza, Beni Shisher, Beni Sidel, Beni Bu Ifrur, and Beni Bu Yafer. The Mestassa and Mtiwa people are rapidly giving up the Berber language in favor of Arabic.

1a. Ghomaran: Beni Bu Zra, Beni Mansur.

2. Senhaja Sghir: Zarket, Beni Gmil, Beni Bu Nsar, Beni Khennus, Beni Seddath, Beni Hamid, Beni Beshir, Beni Bu Shibet, Ktama, Beni Mesduy.

C. Arabic.

In the rest of Spanish Morocco the Arabic language prevails. Though its many local and tribal dialects are intelligible to all Moroccan Arabs, they fall into two main groups, distinguished by certain peculiarities in phonetics and vocabulary: (1) the dialects of the towns and the mountain tribes; (2) those spoken by the nomads of the plains. The latter group, widespread in Algeria and French Morocco, is represented in the Spanish Zone mainly by the Ulad Setut, west of the lower Muluwiya. Most other Arabic dialects of Spanish Morocco belong to Group I.

Arabic is encroaching on Berber from the west. The Beni Bu Zra and Beni Mansur are the only Ghomaran tribes which have retained the Berber idiom; the rest speak Arabic with a large admixture of Berber words. Just east of Ghomera the people of Mestassa and Mtiwa are rapidly forgetting their

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aboriginal language and adopting Arabic. Many Berbers speak Arabic very well, and in every Berber community the traveller will find some men who know enough of it for ordinary business.

Arabic is, of course, a written language. Literary Arabic is different from the spoken idiom. It has preserved, at least potentially, all of the vocabulary and grammatical forms which it possessed a thousand years ago, and has borrowed many modern European words for new and foreign concepts. It is never used in conversation. Newspapers, personal letters, telegrams, books, articles, and formal speeches are all in literary Arabic; but the best educated men in Morocco speak to each other in the colloquial language.

The various colloquial dialects have a simpler grammar and a much smaller vocabulary than literary Arabic, but they are not merely its degenerate descendants. Some of them probably go back to dialects spoken by the Arab invaders of North Africa between the 7th and the 12th centuries; others have been strongly modified by Berber influence or have followed an independent course of development. They are seldom written, except in advertisements and propaganda leaflets addressed to the common people.

III. Arab-Berber Antagonism.

The linguistic distinction between Arabs and Berbers is not strongly correlated with other cultural

differences. Most of the Arabic-speaking tribes of Anjera, the Jebala, and the western Rif resemble the Berber-speaking Rifians in their costume and many of their habits, and feel little sympathy with the Arabs of the towns. They are often classified as "Arabized" or "Arabophone" Berbers. Natives of the central and eastern Rif, who have kept their aboriginal language, regard them as somewhat degenerate, though they feel less antagonistic toward them than they feel toward the Arabs of the towns and the plains. In the latter instance, the antipathy is profound. One authority states that the Rifian Berbers will sooner adopt European dress and habits than those of the Arabs.

IV. Industries and Economic Life.

Outside of Tangier, Tetuan, and a few other towns, the Moslems of Spanish Morocco live on a very primitive level. Their mountainous environment and their suspicious attitude toward all strangers have isolated them from the Moslem civilization of French Morocco and the Algerian coast as well as from the modernizing influence of Europe. The Arabs of the towns look down on them as ignorant, superstitious rustics.

Most of them live in tiny hamlets, cultivating little patches of ground in the valley bottoms or on the mountain-sides. Feuds between families and villages keep the dwellings widely scattered. Houses are usually of stone, sometimes of wood and clay, and often have gabled roofs. Nomads of the plains usually live in tents.

Chief Industries.

Aside from agriculture and the raising of livestock the chief industries are the weaving of woolen garments, olive-pressing, leather-working, and metal work. All of these are done on a very small scale. Leather-working, nearly monopolized by the men of Taghzuth, is the only native industry which supplies a large foreign market. Most of the fine tooled leather which is sold in the bazaars of Fez and Tetuan is turned out by Taghzuthi craftsmen, many of whom run workshops in the towns. Before Spain disarmed the natives, Taghzuth also specialized in the making of firearms. Gunpowder for the trade was produced in a few districts, such as Beni Mesduy in the Rif. Ornaments and brass articles are the work of Jews. Blacksmiths form a separate and degraded caste.

Agriculture

Most natives live primarily on agriculture. In Spanish Morocco, as in the rest of North Africa, there is a fairly clear division between highland and lowland crops. Highlanders depend mainly on tree-fruits, nuts, and leguminous vegetables; lowlanders specialize in barley and wheat. Agriculture in the central mountains of the Rif is further characterized by terraced irrigation, the only method of bringing the steep slopes under cultivation. So many small streams are captured in this way that the farmers in lower country suffer for lack of water except in the rainy season. The lowlands of the eastern Rif, and most of the coastal area

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produce but one crop of maize and vegetables each year, while two crops are planted and harvested successively in the highlands; but the lowlanders are compensated for this deficiency by holding a greater area of arable land. The Beni Bu Yahyi, Metalsa, and Ulad Setut, on the arid plains of the extreme east, follow a nomadic, pastoral routine, in which sheep, cattle, and camels are the main livelihood.

The seasonal aspects of agriculture determine not only the relative food supply but the amount of man power available for fighting and other activities at different times of the year. The following data for the highlands of the Rif show agricultural occupation month by month, and give a rough idea of the complexity of the general agricultural timetable.

Agriculture in the Rif, by Months

- January: Plowing. Sowing of barley, sheshana, broad beans, lentils.
- February: Sowing of broad beans and lentils continued.
- March: Terraced fields on the mountain slopes are plowed, and sown with rye and peas.
- April: Planting of potatoes, beans, carrots, turnips, onions, peppers.
- May: Fruit trees cultivated, manured, and watered. Grape vines manured and pruned.
- June: Harvest (in the following order) sheshana, lentils, barley, peas. Irrigate the terraces on which these have been growing and sow maize there. Thresh (in the following order) sheshana, lentils, peas, barley. Harvest rye at end of June.
- July: Harvest first crop of maize. Plant second crop of maize (another variety, which grows faster) on the

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same terraces. At end of July, pick and store almonds and walnuts.

August: Harvest turnips, potatoes, small beans; plant in their place more potatoes, turnips, and black beans. Plant onion seed; cover the onion shoots with manure and branches to keep them warm for winter. Toward end of August, pick figs, and prepare them for drying. Pick pomegranates and carob beans.

September: The grape season. Grapes picked and set out to dry.

October: Toward end of October, pick olives and pack them in salt.

November: Graft fruit trees. Cut wood and brush for fuel for winter.

December: Pick oranges. Repair agricultural instruments.

In the Rif the most important months for agriculture seem to be January, April, May, June, July, August, and September. A distinct lull in activity occurs in November and December, while the only important operation in October is the harvest of olives toward the end of the month.

Subsistence Level

Most of the natives of Spanish Morocco live on a very narrow margin of subsistence. There is no surplus of food for any large number of foreigners. In some districts there is barely enough food to last over till the next year's harvest. When a crop fails, the natives are reduced to a starvation diet of acorns and other wild vegetables.

Personal fortunes are therefore extremely unstable. A family which, in one generation, owns its own farm and employs landless people to work for a share in the crops, may, in the next generation, be forced to till the fields of some other

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family in order to keep alive.

Imported Commodities.

The natives import the following commodities: cotton cloth, green tea, sugar, soap, matches, candles, kerosene. They have become so accustomed to these goods that they suffer acutely when deprived of them. Practically all clothing for women and the undergarments of the men are made of cotton. The woolen cloth woven in the country would not be nearly sufficient to cloth the people, even if they were willing to wear it next to their skins. Green tea, seasoned with loaf sugar, is their habitual drink, and is essential on all social occasions. Soap is likewise indispensable, since the natives are seldom dirty from inclination, and recognize that cleanliness is necessary for health. Old native means of lighting have long been replaced by mataches, kerosene lamps, and candles. It is only under great hardship that the Rifians are now trying to revive their ancient olive-oil lamps. The worst effect of the war on the people of Spanish Morocco has been the shortage of imported materials.

Local Trade Centers

Trade in the towns is concentrated in special streets or sections of streets, where shops devoted to the same goods or handicrafts are grouped together. In rural districts it is conducted in weekly markets. Each of these markets (called in Arabic a suk) is usually located on an open piece of ground at some distance from the nearest

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village, but at a point where people from several villages can visit in the course of a day's walk. It is named from the day of the week on which it is held, such as Suk el Khmis (Thursday Market) or Suk el Had (Sunday Market). Weekly markets are generally arranged so that itinerant traders and craftsmen can visit several during the week. A village may have two or more of these markets within a convenient distance. Formerly the country market-places were uninhabited except on their market-days, but the Spanish government has attempted to build them up as permanent centers. They form strategic points for the distribution of goods, the administration of law and justice, and the circulation of rumors, and should be utilized for these purposes by any foreign power which occupies the country.

V. Government and Society

Native government varies locally, from a democratic system of village, district, and tribal councils in the central Rif, to the relatively autocratic rule of a few sherifian and marabutic families in the west. The most rudimentary form seems to prevail among the nomadic tribes of the eastern Rif, where it is reported that the judicial council consists only of two or three men who meet in the market-place. Tribes in the western part of the colony are usually governed by a hierarchy of chiefs--caids, khalifas, and sheikhs. The latter is the Arab system, and has tended to replace the Berber form of representative government.

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The social scheme of the Berbers differs considerably from that of the Arabs, especially from that of the Arab towns. The two most important differences are the democratic organization of the Berbers, in contrast to the hereditary aristocracy among the Arabs, and the greater social freedom enjoyed by Berber women. The latter distinction is very striking as one passes from an Arab town like Tetuan, where all respectable females old enough to be sexually interesting--and older--are veiled and sequestered, to a Berber village in the Rif, where bare-faced women work in the fields with the men and converse quite casually with strangers.

VI. Religion.

The Moslems show considerable variation in the strength of their religious reactions and in the emphasis which they give to the different aspects of their creed. Tangier and Tetuan are conventional Moslem communities where most of the religious life is focussed on the large official mosques. Here piety is to some extent correlated with social prestige; it is the "respectable" men who attend the mosques most regularly and are most punctilious in the formal duties of Islam. Practically every town Moslem observed the fast of Ramadan; but the common working-man often neglects his daily prayers and enjoys a wine-party when he can afford it. Moslem fanaticism seems to be strongest in Sheshawen, which is sanctified by the tombs of celebrated saints and by

many holy men in the living population. Religious fervor is also strong in the Jebala district. Many young men of the Jebala become tholbas (religious students), and travel as preachers, readers of the Koran, and charm-writers, into other parts of Morocco. In other rural areas, religion may be only half-hearted. Though every kifian community has a mosque, and follows the fundamental rituals of Islam, many Rifians raise pigs secretly, and eat pork, which is strictly forbidden by Moslem law. Moslem orthodoxy seems to have strengthened its hold on the Rif within the last twenty years due largely to influence from Arab religious centers; but the old sectional and tribal spirit, and the fundamental hostility to Arabs makes this a very slow and uncertain process.

Religious Brotherhoods and the Cult of Saints.

From a strategic point of view, the religious brotherhoods and the cult of saints are the two most important features of Islam. The cult of saints is based on the concept of personal holiness (baraka) which can be derived either (1) by descent from the Prophet Mohammed, or (2) by leading a virtuous, pious, contemplative life. Once acquired this baraka becomes hereditary in the male line of descent. One who derives his holiness through descent from the Prophet is called a sherif (plural shurfa; feminine, sherifa). Other holy people are called marabutin (masculine singular, marabut feminine singular, marabuta), a word which may also include the shurfa. The shurfa comprise the true aristocracy of Morocco. Many marabutin have originated among the lower

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classes and their prominence tends to vary with their personal reputation or with the prestige associated with the tomb of their sainted ancestor.

Saints' shrines and tombs are places of pilgrimage. People come to them to ask the aid of the saints in their personal affairs. The shrines serve as religious centers for the women, who can take little part in the worship at the mosques, and who often ask the saint to give them husbands and children. Petitioners make offerings of food at the shrine, and sometimes attach to the lattice of the window a strip of cloth from their garments, or a lock of their hair. The tombs of the most famous saints are usually marked by a gubba. This is a whitewashed building of one or more rooms, surmounted by a dome or by a pyramidal roof of green tiles. A more modest structure, likewise whitewashed but with a flat roof, is called a bit. The simplest form of shrine, is a whitewashed wall surrounding the grave, or sometimes merely a ring of stones. A definite area of ground around the shrine may be marked off as the horm, the sacred domain of the saint. This is sometimes delimited by a small pile of stones erected at each point from which the shrine first becomes visible. Such a cairn is imbued with the baraka of the saint just as is the shrine itself. Traditionally the horm may serve as a sanctuary for fugitives. Strangers should never enter it for any purpose without the express approval of the custodians. Above all, Christians should never approach the shrine if they can possibly avoid it, and should never touch

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it or show any interest in it. Their very presence is defiling.

Religious brotherhoods were founded by saints, and are usually led by the descendants of the founders. The brotherhood has its headquarters at the founder's tomb, to which the members come on pilgrimage, and maintains a number of subsidiary lodges (each called a zawia) in different parts of the country. These fraternities do not openly take part in secular politics, but they have a great deal of popular influence. The most prominent are the Tijaniyin, with a wealthy and aristocratic membership; the Derkawa, rabidly anti-European; and the Heddawa, a group of ragged, degenerate beggars who are greatly addicted to the smoking of hemp.

VII. Modern Nationalist Parties.

Until very recently the Moslem religion was the only force which united most of the natives of Morocco, and this had failed to give political solidarity. The idea of nationalism, as opposed to the loyalty toward religion, tribe or family, was entirely foreign to Moroccan thought. It was not until young Moroccans began to receive some modern education, and to express their common grievances against the colonial governments, that the nationalist movement began. The first nationalist parties were formed in the French Zone. Their activities in this area culminated in 1937, when the French arrested and prosecuted a number of their leaders and suppressed their publications. By this time the movement had

spread to Spanish Morocco.

At the outbreak of the Spanish Civil War, General Franco outbid the Republican Government for Moroccan support, and allowed the natives to organize several political parties.¹

The two largest parties in Spanish Morocco, both of which favor the Axis, are: (1) The National Reform Party (Hizb al Islah al Watani), the smaller of the two, founded at the end of 1936 by 'Abd al Khalik Turrais ("Torres"). Though it strongly supported General Franco during the Civil War, in 1938 and 1939 it demanded certain reforms of the Khalifa and the Spanish High Commissioner. After the outbreak of the present war it expressed strong dissatisfaction at Spanish policy, and has since collaborated with the Moroccan Unity Party in maintaining a "Plan for Moroccan Reform". It has recently displayed violent hostility toward Great Britain. Its members use the Nazi salute and march under a black and white flag. 'Abd al Khalik Turraid publishes a newspaper called "Al Hurriyah" (Freedom), which terminates its articles with the exclamation "Glory and Honor to Morocco!"--the blasphemous use of a phrase which pious Moslems reserve for God.² (2) The Moroccan Unity Party (Harakat al Wahda al Maghribiya), organized in 1937 by Muhammad al Makki an Nasiri, to carry on the activities of

¹British N.I.D., Morocco, Vol. 1, pp. 189-190.

²Confidential source, April 23, 1942.

the former "Nationalist Bloc" of French Morocco. Advocating a "Plan for National Reform", it represents the conservative wing of the Nationalist movement. It is financially supported by the Spanish government and cooperated closely with Franco. This party has devoted special attention to education, and has opened two schools at Tetuan and one at Larache. In 1938 it founded a "Moroccan House" in Cairo, Egypt, and organized missions of Rifian students to Cairo and of Egyptian teachers to Tetuan, with subventions from the Spanish government, which were, however, suspended in December 1939. Since the outbreak of the present war it has organized demonstrations against the French authorities in Morocco, in collaboration with the National Reform Party.¹ It is actively hostile toward Great Britain.² This party publishes a paper called "Unidad Marroqui".³

A less important group, the "Bureau of National Defense" (Maktab ad Difa' al Watani) was organized early in 1938 by Ibrahim al Wazzani, to continue the activities of the "Popular Movement". In the spring of 1939, while visiting Cairo, Al Wazzani addressed a violent message to President Roosevelt. He was at once arrested and expelled, and returned via Rome to Tetuan, where he opened an "Office of

¹British N.I.D., Morocco, Vol. I, p. 190.

²Confidential source. April 23, 1942.

³L'Afrique Francaise, 1939, pp. 44, 76.

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The "Party of the Free" (Hizb al Ahrar) is a small, conservative Moslem group, largely run by two relatives of the former Rifian chief 'Abd al Krim. It has no outward connections with the Moroccan Nationalist parties, and was involved in disturbances with the National Reform Party at Larache in December 1939.²

These parties--especially the "Moroccan Unity" and the "National Reform"--figure prominently in every discussion of modern Moroccan politics, and there is some danger of overestimating their influence with the public. Most of the natives of Spanish Morocco have probably never heard of them. Their membership is mainly composed of educated young Moslems in the towns, and they appeal to a discontented urban group rather than to the hard-working peasants. From a tactical point of view, they may indicate the feelings of certain classes in Tangier, Tetuan, and other urban centers, and they undoubtedly can be used as instruments of propaganda. But their organization is very unstable, their plan of reform is nebulous and unpractical, and their aggressive activities have so far been confined to demonstrations.

VIII. Attitudes of Native Military Units

Far more significant and more powerful are the

¹British N.I.D., Morocco, vol. I, pp. 190-191.

²Ibid., p. 191.

native military units organized by the Spanish. The recruits are drawn from all social classes and from all parts of the colony. Their opinions of Europeans are formed by years of personal experience, often under the most trying conditions. When they return to their villages, or talk with natives elsewhere, their prestige as warriors and travellers will give weight to their words.

Fifty thousand Moroccans--mostly from the Rif and the Jebala--fought hard for Franco in Spain during the Spanish Civil War, gaining considerable experience in modern mechanized warfare. They were apparently well satisfied with the treatment they received from their commanders, for they are said to be still devoted to them. On the other hand, they have no love for the French.¹ It should be remembered that these Moroccans shared Franco's victory, and that they know that Franco, who was friendly to Republican Spain, has since been defeated. These facts alone will probably influence them in favor of any move that Spain may make against France or her allies.

On the other hand there is strong evidence that a large number of Riffians (some 50,000 to 80,000) might be induced to rebel against Spanish control if furnished with small arms and ammunition. Spain has taken great care to secure their loyalty. A confidential dispatch dated

¹ British N.I.D., Morocco, Vol. 1, p. 225.

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October 8, 1941¹ reports that native military units receive far better rations and uniforms than the Spanish soldiers. At that time it was estimated that there were 74,500 Arab and Berber soldiers in Spanish Morocco.

IX. Popular Attitudes and Propaganda.

The attitudes of the general native population are very difficult to gauge. French sources have commented on the fact that the 'coefficient of military security' in Spanish Morocco is six soldiers for every hundred inhabitants whereas in the French Zone the ratio is only one to every hundred.² This may not imply that the natives of Spanish Morocco are more dangerous, but simply that a larger proportion of the area is under direct military rule.

Recent visitors in Spanish Morocco have observed that the natives and their colonial masters get along very well together. Plenty of good agricultural land is still left to the natives. The Spanish temperament and mode of life are certainly closer to Moslem ways than are those of the French. Governmental policy in Spanish Morocco, with the granting of a certain amount of self-government to the natives, the relative freedom of the Arabic press, and the subsidies to Moroccan students in Egypt, has produced a very favorable effect on the Moslem population. In Tangier the

¹ O.S.S. Accession 1003.

² L'Afrique française, 1936, pp. 455-460.

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Spanish policy toward the Moslems is said to be more liberal than the French.

Most of the natives in the rural districts of Spanish Morocco have been little affected by war propaganda, and are still indifferent to the outside world. Many do not know that the United States exists; some think that the "Melikan" (Americans) and "Aliman" (Germans) are the same nation.¹ On the other hand, the few natives who do take an interest in international affairs tend to favor the Axis rather than France and the United Nations.

Axis propaganda lines have endeavored to fraction native populations beyond the normal regional antagonisms by playing up anti-Semitism. However, since Moslems have been traditionally anti-Semitic on religious grounds, such propaganda should be considered important only as it tends to demonstrate a certain community of interest between Axis and native Moslem populations.

Stories of the oppression of natives by Spanish officials are believed and circulated by the Moslems on the streets of Tangier. They are no worse, however, than those which the Moslems tell about the French, and merely indicate general dissatisfaction at the colonial powers and the war. A great deal of unrest has been caused in Tangier by the failure of supplies to reach this city from French Morocco, and by the restrictions on travel between Tangier and

¹State, Tangier, 918, July 23, 1942.

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Fez.¹ Natives usually blame the existing government for hardships of this kind, and their friendship could probably be won by any power which bettered the existing conditions. The greatest inducement which we can offer to the Moroccans for their aid in the present campaign is the delivery--not merely the promise--of grain, cotton goods, green tea, sugar, kerosene, and other necessities.

¹O.S.S. Accession 20762, August 22, 1942.

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WHO'S WHO
IN
SPANISH MOROCCO AND THE TANGIER ZONE

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Information on individuals in Spanish Morocco is available on only a limited number of prominent Europeans and natives. In so far as this information pertains to their occupations and official duties, it may be considered reasonably accurate. When, however, information on political sympathies and unofficial activities is included, allowance should be made for the measure of subjectivity inherent in reports of biographical material, especially when this material is largely derived from sources stressing events rather than personalities. It is further to be expected that recent Allied landings in French North Africa will unquestionably lead to numerous changes in individual opinion and status.

All information is based on reports received since April, 1942, unless otherwise noted. Numbers in parentheses following the names on the list correspond to the biography numbers in the alphabetical Who's Who.

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WHO'S WHAT IN SPANISH MOROCCO

I. PROTECTORATE GOVERNMENT AND MILITARY COMMAND

Spanish High Commissioner of Morocco; Commander-in-Chief of the Army, Navy and Air Force; Head of the Falange in Spanish Morocco	Orgaz y Yoldi, General (151)
Secretary General of the High Commissariat	Mugica, General (136)
Director-General of Spanish Colonies	Fontan y Lobe (75)
Khalifa of Spanish Morocco	Mulay Hasan (137)
Chief of Artillery, Spanish Army in Morocco	Odriazola Arevelo, General (150)
Delegate for Industry (Delegacion Economica, Industrial y Comercial)	Figueras (74)
Chief of the Accounting, Money and Banking section of the <u>Delegacion Economica, Industrial y Comercial</u>	Garnica Guerra (81)
Chief of the Section of Internal Commerce of the <u>Delegacion Economica, Industrial y Comercial</u>	Massa Mas (128)
Technical Administrative Assessor of the High Commissariat	Echevarri e Ibarra (70)
Minister of <u>Habous</u>	Abd el Kader (2)
Chief of the Maritime Services (Ports, Harbors and Coastal Installations)	Carlès, Captain (52)
Investigator of Services of the High Commissariat	Iñiguez Martinez (103)
Chief Architect for the Protectorate	Llobet Ruiz (123)
Chief Engineer for the <u>Servicio Agronomico</u>	Torrejon Montero (201)

II. TANGIER(1) GOVERNMENT AND MILITARY

Spanish General; Delegate to Tangier of General Orgaz	Uriarte, General (207)
Spanish Colonel; In charge of Spanish occupation of the Tangier International Zone	Yuste, Colonel (218)
Chief of Occupation forces; Chief of Spanish forces of occupation, and personal representative of the High Commissioner (Orgaz) in Tangier	Granados, Colonel (90)
Alcalde of Tangier	Aranaz, Commandante (18)
Pasha of Tangier	Temsamani, (199)
Spanish official; Chief of Civil Administration	Carvejal, Lt. Colonel (55)
Director of Finances	Goligher (87)
Pro-German Spanish officer; commander of the 5th Regi- ment of Spanish Infantry	Dapalleja, Colonel (63)
Judge; on Tangier Mixed Tri- bunal	Bevilacqua (37)
Judge; on Tangier Mixed Tri- bunal	Ceballos (58)
Judge; on Tangier Mixed Tri- bunal	Defye (64)
Judge; on Tangier Mixed Tri- bunal	Delore (68)
Judge; on Tangier Mixed Tri- bunal	Diaz Merry (67a)
Judge; on Tangier Mixed Tri- bunal	Galibert (79)
Judge; on Tangier Mixed Tri- bunal	Malmusi (126)

II. TANGIER

(1) GOVERNMENT AND MILITARY (CONTINUED)

Judge; on Tangier Mixed Tribunal	Rafferty (162)
Judge; on Tangier Mixed Tribunal	Raida (163)
Judge; on Tangier Mixed Tribunal	Soudan (191)
Judge; on Tangier Mixed Tribunal	Villagram (211)
Rabbi; President of the Tangier Rabbis' Tribunal	Benchimol (30)
Director of Justice	Marchegiano (127)
Police official; Chief of Spanish Police in Tangier	Rodrigue (177)
Police official; Inspector of Police	Pancrazi (152)

(2) AXIS AGENTS AND SYMPATHIZERS

German Consul-General	Roith (Dr.) (166a)
German Vice-Consul	Kruger (116)
German Vice-Consul	Goeritz (Dr.) (86)
Press attaché	Pfoertzgen (160)
German consular officer	Hoffman (100)
Chief German propagandist; Press Attaché	Wiedemann (214)
Chief German propagandist	Brandt (43)
German propagandist	Bernard (36)
German propagandist	Losbacher (124)
Gestapo agent	Bach (23)
Gestapo agent	Bartl (27)

II. TANGIER(2) AXIS AGENTS AND SYMPATHIZERS (CONTINUED)

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Gestapo Agent	Braun (44)
German agent	Allard (Mme.) (7)
German agent	Boland (39)
German agent	Caleron Diaz (51)
German agent	Holtz (101)
German agent	Huber (102)
German agent	Jantzy (106)
German agent	Kroell (114)
German agent	Krughen (117)
German agent	Muller (138)
German agent	Pederson (Fr#ulein) (155)
German purchasing agent	Bendahan (31)
German purchasing agent	Schnitzler (184)
German employee	Delgado (65)
Possible German agent	Carranza, Captain (53)
Secretary at German consulate	Berger (35)
Clerk at German consulate	Hemmerstetten (99)
Clerk at German consulate	Brunstorf (45)
Italian consul	Badoglio (24)
Italian Commandante; Mili- tary Attache	Vincigerra, Commandante (212)
Moorish agitator	Amkished (16)
Moroccan Nationalist	Balafrez (25)
Italian intelligence agent	Fragola (76)

II. TANGIER(2) AXIS AGENTS AND SYMPATHIZERS (CONTINUED)

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Italian intelligence officer	Ulargi (205)
Italian intelligence officer	Garassino (80)
Italian intelligence officer	Gilardoni (83)
Italian intelligence agent	Brancolini (41)
Italian informer on Morocco	Girelli (85)
Italian agent	Ribbi (171)
Italian agent; a Spaniard	Sanchez (179)
Japanese agent	Hasebe, Major (97)
Spanish intelligence officer	Navas, Lieutenant (144)
Honorary Peruvian consul in Tangier	Richard (172)
Hotel Concierge	Nolto (146)
Professional agent	Nublat (147)
Pro-Axis agent	Gayot (82)
Suspected Axis agent	Brandes (or Brandeis) (42)

(3) ALLIED SYMPATHIZERS

British Consul General	Gascoigne (85 a)
Retired U. S. consul	Blake (38)
Doctor	Carrot (54)
Retired French Colonel	Mealin, Colonel (129)
Native leader	R'Kaina (176)
American protégé	Bergel (34)
American "special service" protégé	Nassar (142)
American semsar	Abitbol (6)
American semsar	Coriat (12)

II. TANGIER

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(3) ALLIED SYMPATHIZERS (CONTINUED)

American semsar

Jarrat (107)

American semsar

Mamam (141)

American mohalat

Gozal (89)

American mohalat

Tanjawi (195)

(6211)

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III. TETUAN

(1) GOVERNMENT AND MILITARY

Army officer; military commander of Tetuan; commander of the 91st Division	Rios Capape, General (174)
Pasha of Tetuan (1940)	Axaax (22)
In Delegacion de Economia, Tetuan	Arruebo Pradas, Colonel (20)
Government finance official	Esterez Jiminez (71)
Court official; Secretary of the Court of First Instance	Fernandez Novoa (73)
Moorish officer; captain in the regular Spanish Infantry	Kadimiri (109)

(2) AXIS AGENTS AND SYMPATHIZERS

German consular officer	Braun (Dr.) (48)
German consular officer	Richter (Dr.) (173)
German consular officer	Ritter (175)
German Military Attache	Schmiedo (185)
German propagandist	Amersen (15)
German propagandist	Langenheim (119)
German propagandist	Pfiehlen (159)
German intelligence officer	Recke (165)
Gestapo agent	Bohrens (29)
Gestapo agent	Gudjens (92)
Gestapo agent	Schroeder (186)
German political agent	Schultz (187)
German agent	Koehn (111)
German agent	Krausner (115)

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III. TETUAN

(2) AXIS AGENTS AND SYMPATHIZERS (CONTINUED)

German agent	Schichtig (183)
German agent	Paschkes (153)
German agent	Royes y Cruz (168)
Typist at German consulate	Koenig (112)
Chief of Italian intelligence service in Spanish Morocco	Dacunto, Major (62)
German propagandist	Takieddin(Dr.) (194)
Native nationalist leader	Torres (202)

(3) ALLIED SYMPATHIZERS

British Consul at Tetuan	Money penny (134)
American "special Service" protégé	Raisuli (164)
Reported pro-Allied	Jilali (108)

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IV. CEUTA

(1) GOVERNMENT AND MILITARY

Court official, Secretary to Regional Tribunal, Ceuta Gonzales de la Prada (88)

Judge on Regional Tribunal Muñoz Lopez (139)

Judge on Special Civil Court of Political Responsibilities Such Martin (193)

Court official; Special Civil Court of Political Responsibilities Navarro Alza (143)

Court official; Provincial Inspector of the Court of Political Responsibilities Perez Santaña (157)

(2) AXIS AGENTS AND SYMPATHIZERS

German agent Ulrich (206)

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V. MELILLA

(1) GOVERNMENT AND MILITARY

Lord Mayor of Melilla; local head of the Falange	Alvarez-Claro (8)
Spanish General; commander in chief of the 10th Army Corps	Yague (216)
Spanish officer; commanding officer at Melilla	Sanchez, General (180)
Commander of 101st Division of the 10th Army Corps, Spanish Army	Delgado Serrano (67)
Spanish General; Commander of the 102nd Division of the 10th Army Corps	San Padro, General (181)
Chief of Public Works Dept.	Alvarez de Maria (13)
Captain of Port	de la Camara y Diez (49)
Chief of Municipal Police	Perez Zapata (158)
Spanish lawyer; secretary to <u>Delegacion de Gobierno</u>	Valazco (209)
Judge	Yrassarri (217)

(2) AXIS AGENTS AND SYMPATHIZERS

German vice-consul	Kraemer (113)
German Gestapo agent	Lackner (118)
German intelligence officer	Becke, Colonel (28)
Italian vice-consul at Melilla	Ribella (169)
French Consul at Melilla	Ribes, C. (170)

(3) ALLIED SYMPATHIZERS

British Vice-Consul	Croker, Richard (61)
Merchant	Benhamon (32)

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V. MELILLA

(3) ALLIED SYMPATHIZERS (CONTINUED)

Merchant	Cohen (60)
Merchant	Salama (178)
Merchant	Taurll (196)

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VI. LARACHE

(1) GOVERNMENT AND MILITARY

War Department official;
Supervisory commander of the
commissary of War

Delgado (66)

Court official; Secretary of
the Court of First Instance

Ballestre (26)

(2) AXIS AGENTS AND SYMPATHIZERS

German consul

Renschausen (167)

German propagandist

Wilmer (215)

German agent

Bracen (40)

German agent

Burnhard (47)

(3) ALLIED SYMPATHIZERS

American semsar

Castiel (56)

American semsar

Tmimi (200)

American mohalat

Sousi (192)

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VII. OTHERS

VILLA ALHUCEMAS

Commander of Central Region,
from Chechaouen to the Nkor
River

Perez, Colonel (156)

CHECHAOUEN

American semsar

el-Asri (17)

American semsar

Mohammed Grandi (94)

EL-KSAR-EL-KEBIR

German intelligence agent

Grosshopp (91)

American "special service"
protégé

Hamam Slawi (188)

GOMARA

Supervisory captain of the
Commissary of War

Aranguiz, Captain (19)

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WHO'S WHO IN SPANISH MOROCCO

Abdelbaki, Ben Yahia	Reported pro-Allied.	Tangier	(1)
Abd-el-Kader Ben Musa, Sidi Mohammed	Ministre des Habous. Succeeded Abdel Khalek Torres to the position in 1937.	Tetuan	(2)
Abd El Malek Ben Abbou, Si Allal ben	Native leader. Turned anti-Spanish by being one of many fined in 1939 for "traitorous activities". Great- grandson of Abd-el- Kader, famous anti- French leader. Son of leading German agent during last war.	Tetuan	(3)
Abensour	Runs Pariente & Co., one of the few small Tangier banks not under German supervision. May be a British subject.	Tangier	(5)
Abitbol, Mair E.	American semsar. In 1941 was employee of the Atlantic Refining Co. in Tangier.	Tangier	(6)
Allard (Mme.)	<u>Proprietress of Coq</u> <u>d'Or</u> , a tavern, and agent for German Press Attache Wiedemann, Tangier.	Tangier	(7)
Alvarez-Claro, Raphael	Lord Mayor of Melilla. Also local head of the Falange. Reported as strongly anti-British, and described as "a vast, coarse man who was loading sacks of potatoes on Melilla quay, or something of the sort, years ago." A contra- bander during the Rif cam- paign and the Civil War, he is credited with wrecking his own ship, the "Teresa", an old vessel used to carry	Melilla	(8)

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Alvarez-Claro, Raphael	stores to the troops or for other lucrative assign- ments, in order to claim another vessel of the Franco government as compensation. After the Civil war he was given another ship -- a Russian one confiscated by the Falangists.	Melilla	(8)
Almonino, Vinda de Isaac	Member of Jewish colony	Melilla	(9)
Cohen, Moises S.	Merchant. Member of Jewish colony in Melilla	Melilla	(10)
Contreras y Vilchers, Don Jose	A superior type of Span- iard, middle aged, thin, clever. Ingeniero Direc- tor of Minas del Rif. Realizes that Spain will never be "united, great and free" and that with the exception of a few opportunists the majority of Spaniards care for little but their personal well- being. All he himself cares about is obtaining regular supplies of coal, gas-oil and spare parts for his mines.	Melilla	(11)
Coriat, Moses A.	American semsar. Agent in 1941 for Socony Vacuum Oil Co., in Tangier.	Tangier	(12)
Alvarez de Maria, Tomas	Chief of Public Works, Dept., Melilla. Jefe del Puerto y Formento. A new man on the political scene	Melilla	(13)
Amentag, Hamed ben el-Hadj Mo- hammed	American semsar	Tangier	(14)
Amersen, Guenther	German propagandist. Attached to Propaganda De- partment of German Consu- late. A Norwegian-born German agent, from Norden, he is about 30 years old.	Tetuan	(15)

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Ankished	Moorish agitator. Axis agent, possibly involved in guilt for bomb explosion, Tangier, Feb. 6, 1942. Said to have been leader of rioters against British the next day.	
Asri, Ahmed ben Abdeslam el-	American semsar. In 1941 was employee of Socony Vacuum Oil Co., in Chechaouen.	Chechaouen (17)
Aranaz (Commandante)	Alcalde of Tangier. Commandante (major) in the Spanish Army, and local mayor (Alcalde) of Tangier.	Tangier (18)
Aranguiz, Luciano Fernandez	War Department official. Supervisory captain of commissary of war at Gomara.	Gomara (19)
Arruebo Pradas, (Col.) (See Pradas. Arruebo, 161)	In Delegacion de Economia, Tetuan. A Colonel in the Spanish army, former High Staff School Teacher in Madrid; deprived of his position for political reasons. Due to his friendship with General Orgaz he obtained a civilian position with the Delegacion de Economia in Tetuan. He is reported to have said that if Spain entered a war and if he were sent to the front, he would have more hatred for the Spanish government than for the enemy, whoever it might be.	Tetuan (20)
Auday, Vinda de Jaime	Merchant. Member of Jewish colony, Melilla.	Melilla (21)
Axaax, Sidi Mohammed,	Pasha of Tetuan (1940). Visited Spain in 1940 and was awarded Cross of Isabella the Catholic for his aid to Franco	Tetuan (22)
Bach, Max Franz	Gestapo agent. Fourth Gestapo paymaster; arrived in Tangier February 24, 1942.	Tangier (23)
Badoglio	Italian consul. The son of Marshal Badoglio; while Italian consul in Tangier he led a group of about 10 Italians who roughed up Lt. Holcomb, USMC, July, 1, 1942.	Tangier (24)

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Balafrej Moroccan Nationalist. Tangier (25)
 A Moroccan, chief of the "Movement of Young Moroccan Nationalists," to aid which the Germans are reported to have given 25,000,000 French francs. He often visits Berlin. Is under death sentence from Securite Publique, Rabat, French Morocco. The Spanish are said to have given 15,000,000 francs to him and his three colleagues, Allal el Fassi, Omar Ben Abdjlil, and Brahim el Ouazzani.

Ballestre, Basilio Court official. Secretary of Larache (26)
 Marti the Court of First Instance in Larache.

Bartl, Max Paul Gestapo agent. A Gestapo Tangier (27)
 agent at the German consulate in Tangier, and a well-known German national resident in the city, he is a stocky man, broad shoulders, very fair, blue eyes; clean shaven face, 5'6", quiet, lives with his wife at Hotel Rif. He was formerly with the Gestapo in Bavaria. Attended meetings in Spain negotiating for German supervision of the police force in Spanish Morocco. Warrants for the arrest of Spaniards and foreigners by the Spanish police in Tangier valid if signed by him and Ernst Gudjens. He is 40 years old.

Becke(Col.) German intelligence officer. Melilla (28)
 Chief of German intelligence organization at Melilla. Has contacts with several wireless operators of small Spanish vessels.

Behrens, Hermann German Gestapo agent. Member Tetuan (29)
 of staff of German consulate in Tetuan. An active propagandist for Germany, also a Gestapo agent working under Becke. A native of Bremen, he was born 29 February, 1916, and previous to his leaving Germany was with the North German Lloyd.

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Benchimol, Sudah de Abraham	Rabbi. President of the Tangier Rabbis' Tribunal	Tangier (30)
Bendahan, Jacques	German purchasing agent. Is said to act as intermediary in the purchase of goods for Germany, although apparently he limits himself to placing purchasers in contact with sellers. His address in May 1942 was #1, Blvd. Andree, Tangier.	Tangier (31)
Benhamon, M.	Merchant. Owner of Benhamon (M.) & Fils. One of more prominent members of Melilla Jewish colony.	Melilla (32)
Benzaquen, Yamin Benarroch	Merchant. Member of Jewish colony, Melilla	Melilla (33)
Bergel, David S.	American protégé. A Tangier Jew; U.S. protégé by virtue of "signal service."	Tangier (34)
Berger, Irene	Secretary at German consulate. Miss (or Fräulein) Berger serves as secretary to German vice-consul Goeritz at the German Consulate, Tangier. She is 32, born October 28, 1910.	Tangier (35)
Bernard, Johan	German propagandist. Suspected of propaganda activities for the Germans in Spanish Morocco, but may have left the country by now.	Tangier (36)
Bevilacqua	Judge. On Tangier Mixed Tribunal, one of 11 judges. (For list cf. Villagram)	Tangier (37)
Blake, Maxwell	Retired U. S. consul. Former U.S. diplomatic representative in Tangier who retired and remained in Tangier. Mentioned as a "helpful personage" to Americans there.	Tangier (38)
Boland, Georges	German agent. A Belgian now serving as a German agent and informer. Works with the owner of a small fishing vessel, Jose Calderon Diaz.	Tangier (39)

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Bracen, Gerardo German agent. An employee Larache (40)
of Renschausen, a German
agent in Larache.

Brancolini, Dante Italian intelligence agent. Tangier (41)
Member of OVRA, he is in
the Axis intelligence ring
in Spanish Morocco and has
at least four agents work-
ing under him.

Brandes (or Suspected Axis agent. The Tangier (42)
(Brandeis), Mme. divorced wife of head of
Claire Brandeis Investment Co.,
Omaha, Nebraska. Since her
divorce in 1938 has lived in
Tangier, at the Hotel Letitia,
3 rue Goya. Receives regular
alimony from ex-husband E. J.
Brandeis in the U.S.A. and is
suspected of using money to aid
Axis activities.

Brandt, Hans Max Chief German propagandist Tangier (43)
officer. Attached to the
German consulate in Tangier
as Chief of the propaganda
section, he is also a captain
in the Gestapo. Stays in room
408, Hotel Rif. About 6'1";
well built, fair, blue eyes, clean
shaven, hail-fellow-well-met type,
38 years old born May 2, 1906.
Mistress, Mlle. Laperne.

Braun, Helmut Gestapo agent. Officially Tangier (44)
an attache at the German
Consulate in Tangier, he
often travelled to Fez and is
considered very dangerous.
Bald; stout, about 5'5", oval
face, he is an Oberleutnant and
has been reported as head of the
Gestapo in Tangier and perhaps
Spanish Morocco. In Tangier he
usually stays at the Hotel Rif.

Brunstorf, Albert Clerk. At German consulate. Tangier (45)
Age about 29. From Nortoff.

Bukkeish, Si Moh Wild el Hajj	Native leader. A caid of a tribe in French territory. Reported to be "basically pro-American." Sometimes visits Tangier.	Tangier (46)
Burnhard, Johan	German agent. One of the German agents in Larache working for Renschausen.	Larache (47)
Brahim el Ouazzani	(see Ouazzani, Brahim el)	
Braun, (Dr. Hermann	German consular officer. A career diplomat, supposedly not a member of the Nazi party. About 45, he is listed as German consul in Tetuan.	Tetuan (48)
de la Camara y Diez	Captain of Port. An elderly man. At present is Captain of the port of Melilla and Commander of all Naval establishments there.	Melilla (49)
Canavate Sande, Don Fausto	Commander of garrison. An infantry commander, in 1936 he was commander of the garrison on the Chafarinos Islands, also President of the Junta (Arbitrios) and chief judge on the islands. He was responsible to the military commander of the Melilla zone.	Chafarinos (50) Is.
Calderon Diaz, Joachim	German Agent. Mechanic and owner of small fishing vessel in Tangier. Works with Georges Boland. Reported to have been once assigned to set sail in a storm and "seek refuge" in Gibraltar on some mission for the Germans.	Tangier (51)
Carles, Jose Cabezas (Cap- tain)	Chief of Maritime Services. A captain in the Spanish Navy, he is the Principal Interventor of the Maritime Services, or Director of Coasts, harbors and installations, of the central government of the Spanish Morocco protectorate.	Tetuan (52)

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Carranza(Capt.)	Possible German agent. A Spanish captain. In- formed and intelligent, he has played up to American officials and may be a German plant.	Tangier (53)
Carret, (Dr.) Marcel	Doctor. Address #118 rue S. Francisco. In inter- cepted letter expressed hope for Allied invasion. Possibly pro-Ally.	Tangier (54)
Carvejal(Lt.Col.)	Spanish official. Lieutenant Colonel in Spanish army. Chief of Civil Administration, in Tangier.	Tangier (55)
Castiel, Isaac A.	American sensar. Employee of Socony Vacuum Oil Co., in Larache 1941.	Larache (56)
Cavallero, Don Francisco	Mine official. An oldish person, the manager of the Setolazar Mines.	Melilla (57)
Ceballos	Judge. On Tangier Mixed Tribunal, one of 11 judges. (For list cf. Villagran)	Tangier (58)
Chocron, Yudah Merida	Merchant. Member of Jewish colony, Melilla	Melilla (59)
Cohen, Isaac J.	Merchant. Head of Isaac J. Cohen & co. Melilla import & export house. Member of Melilla Jewish colony.	Melilla (60)
Cohen, Moises S.	(see. no. (10)	
Contreras y Vil- chers; Don Jose	(see. no. (11)	
Coriat, Moses A.	(see. no. (12)	
Crocker, Richard	British Vice-Consul. There are no Americans living in Melilla and he, the British Vice Consul, is the only Britisher there in permanent residence.	Melilla (61)

Dacunto(Major)	Italian Intelligence officer. Chief of Italian intelligence service in Spanish Morocco. Attached to Spanish headquarters staff, first at Ceuta and lately at Tetuan. Often appears in Tetuan in civilian clothes. An Italian army major.	Tetuan (62)
Dapalleja, Juan Fernandes(Col.)	Pro-German Spanish officer. Colonel in the Spanish army, commander of the 5th Regiment of Spanish Infantry at Tangier; said to have "placed himself at the disposal" of the German Commission.	Tangier (63)
Defye	On Tangier Mixed Tribunal, one of 11 judges (for list cf. Villagram)	Tangier (64)
Delgado, Jose	German employee. Employed or perhaps just used by German Purchasing agent Rodolfo Schnitzler.	Tangier (65)
Delgado, Luis Martinez	War Department official. Supervisory commander of the Commissary of War in Larache.	Larache (66)
Delgado Serrano, Francisco	Commander of division, Spanish Army, (101st Division of the 10th Army Corps). A well set up, youngish looking man, 55 years old, he led one of the columns that advanced on Madrid in 1936, later commanded the 82nd Division, participating in the action on fronts in Aragon, Teruel and the Ebro. Delgado acts as Governor of Melilla and Commander-in-chief of the military region during the absence of his commanding officer, General Valino.	Melilla (67)
Diaz Merry	On Tangier Mixed Tribunal, one of 11 judges. (For list cf. Villagram).	Tangier (67a)

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Delore	On Tangier Mixed Tribunal, one of 11 judges. (for list cf. Villagram).	Tangier	(68)
Echevarri e Ibarran, Isaac Gonzalez de	Government assessor. Technical administrative assessor of the High Commissariat of Spanish Morocco.	Tetuan	(70)
Esterez Jiminez, Francisco	Subdelegate of the finance branch of the Spanish Moroccan government, Tetuan	Tetuan	(71)
Fahi el Ghazi, Mohammed ben	Reported pro-Allied	Tangier	(72)
Fernandez Novoa, Luis Carlos	Secretary of the Court of First Instance, Tetuan.	Tetuan	(73)
Figueras, Tomas Garcia	Former delegate for Education and Culture at High Commissioner's office; now in Delegation for Industry.	Tetuan	(74)
Fontan y Lobe, Juan	Appointed in January, 1942, from position as Governor-General of Spanish Colonies in the Gulf of Guinea, to post as Director-General of Morocco and Spanish Colonies.	Tetuan	(75)
Fragola	Italian intelligence agent. On good terms with several Spanish military men in Tangier. Was expelled from French Morocco for spying in 1939.	Tangier	(76)
Gandara, Manuel de la	Retired general. Age over 70, "spends most of his time in cafes," according to report, July, 1942.	Melilla	(78)
Galibert	On Tangier Mixed Tribunal, one of 11 judges. (For list cf. Villagram)	Tangier	(79)
Garassino	Italian Intelligence officer. Assigned by Italian intelligence to publish Spanish language newspaper "Informacion" in collaboration with a Spaniard named Sanchez, who also belongs to the Italian intelligence service. "Informacion" is solid German propaganda.	Tangier	(80)

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Garnica Guerro, Antonio	Full title, Chief of the Accounting, Money & Banking section of the Delegation Economica, Industrial y Commercial of the Protectorate Government.	Tetuan (81)
Gayet, Louis	Pro-Axis agent. Assistant to René Richard, honorary Peruvian consul in Tangier. Hand-in-glove with Germans; has built a house on the waterfront and German consul and a number of German agents live there. His sympathies are firmly pro-Axis.	Tangier (82)
Gilardoni, Giovanni	Italian intelligence officer at Tangier, on good terms with Spanish military men, notably Commandante Madariaga.	Tangier (83)
Giner, Diego	Priest. Head of Parish, Chafarinas Islands, in 1936; probably still there.	Chafarinas (84)
Girelli, Angelo	Italian informer on Morocco. By trade an Italian mining engineer. Actually a well-known informer on Morocco, and for many years was Mussolini's personal representative in the Balearic Islands. A dangerous character; friend of division-general Juan Bautista Gonzales, also on close terms with Jordana, Spanish Foreign Minister.	Tangier (85)
Gascoigne, A.	British Consul General	Tangier (85a)
Goeritz, (Dr.) Herman (Mathias)	German vice-consul. Gestapo agent in Tangier for all questions relating to activities of Jews & Anglo-Americans. Employs agents, chiefly natives and some Jews, to watch Americans in Tangier. Born 24 Nov. 1889 in Nuremberg, he was once a professor of German in Spain, speaks fluent French and Spanish. He was appointed vice-consul in Tangier under consul Noehring in October 1941, announced he was "scandalized" at increases in U. S. consular personnel.	Tangier (86)

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Goeritz, (Dr.) His sister married to Dutch Tangier (86)
 Herman (Mathias) subject, a former police commissioner who has been in Curacao. Goeritz lives in the Hotel Rif. Application to "visit" Dakar in October 1942 "temporarily refused" by Vichy government.

Goligher Listed in 1939 as Director Tangier (87)
 of Finances; may have changed positions since.

Gonzales de la Court official, secretary Ceuta (88)
 Prada, Manuel to Regional Tribunal, Ceuta

Gozal, Leon D. American mohalat. In 1941 Tangier (89)
 was employee of the Atlantic Refining Co., in Tangier.

Granados, Colonel Chief of Spanish forces of Tangier (90)
 occupation, and personal representative of the High Commissioner (Orgaz) in Tangier. A Spanish colonel, Orgaz' right-hand man.

Grosshopp German intelligence agent. El-Ksar- (91)
 An engineer by profession, el Kbir
 he works with a group of other German intelligence officers on the fortifications in Spanish protectorate. Often in Tangiers.

Gudjens, Ernst Chief of the German Gestapo Tetuan (92)
 Alfred in Spanish Morocco. Officially titled Police Attache to consulate, Tetuan. About 30, 5'7", round-shouldered, fair, grey-blue eyes, very pronounced turned up nose. Owns a Mercedes-Benz car, license CDA79.065. Since December 1941 is empowered to order arrests of Spaniards and foreigners in Spanish Morocco by the Spanish police over his signature alone. For individuals in Tangier both his signature and Bartl's are required. Born in Dortmund, Germany.

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Gueman, Sidi Adelak	Reported pro-Allied.	Tangier (93)
Grandi, Abd es Salam ben Moham- med	American sensar. Employee of Socony Vacuum Oil Co., in Chechaouen, 1941.	Checha- ouen (94)
Hagenmacher, Paul	Banker. Director of Comp- toir Commercial du Maroc.	Tangier (95)
Hamid, Azarkan	Native leader. In "Free- dom Party", or "Liberal Party." A relative of Abd el Krim.	Tetuan (96)
Hasebe, (Major)	Japanese agent. Working in collaboration with Ger- mans and Italians. Has a clerk named Moktar.	Tangier (97)
Hassan, Jo	Banker. Owner of Banque Hassan, one of few small banks in Tangier not under German supervision. Of Portuguese Jewish family, his bank is reported to have close connections with the Spanish government; some reports, how- ever, have Hassan as pro-Allied in sentiment.	Tangier (98)
Hemmerstetten, Theodore	Typist and general clerk at German consulate, Tangier.	Tangier (99)
Hoffman	German consular officer. Chancellor of German con- sulate at Tangier; pre- viously in German consu- lates at Baghdad and Haifa. Born November 26, 1896.	Tangier (100)
Holtz, (Dr.) Gunnar	German agent. A Danish national, correspondent for Danish paper "Politiken," closely connected with Ges- tapo in Tangier, either as agent or as paymaster. Also goes under names Horst, Holst, Haust.	Tangier (101)
Huber, Albert	German agent. Tangier manager for Renschausen and Co. Seen often with known German agents.	Tangier (102)

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Tetuan (103)

Iniguez Martinex, Santiago	Government official. Investigator of Services of the High Commissariat of Morocco.	
Jantzy	German agent. Has shop called "Rolny, clothes" and pretends to be a Czech. Supposed to have been head of the Ger- man organization in Tangier before the Spanish occupa- tion in 1941.	Tangier (106)
Jarrat, Abraham M. el-	American semsar. Employee in 1941 of the Atlantic Refining Co., in Tangier.	Tangier (107)
Jilali, Si Abdelkerim ben	Reported pro-Allied	Tetuan (108)

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Kadimiri, Sidi Mohammed ben Mohammed	Moor, captain in the regular Spanish Infantry, given citizenship by Spanish government	Tetuan	109
Koehn, Fritz	German agent. By pro- fession rector of the Academie Allemande in Tetuan. Left Germany in September 1940. Lives at the Hotel Nacional.	Tetuan	111
Koenig, Maria Donges	Typist at German con- sulate, Tetuan. Born April 1, 1901. Lives at Hotel Nacional.	Tetuan	112
Kraemer, Eugenio	German vice-consul. One of the more important Axis agents in Spanish Morocco. A one-time merchant, he owns a cheap suitcase factory ("Ben-Hur" brand) at Melilla and also has several business conces- sions, including esparto grass. About 38 years old, he was formerly a German agent in Madrid and now works under Colonel RECKE, especially on Naval Intelligence work.	Melilla	113
Kroell, Ernst	German agent. Believed to be W/T expert for the German consulate in Tangier. About 30, tall and fair, speaks fluent English and was in South America for about two years before being sent to Spanish Morocco.	Tangier	114
Krausner, Martin	German agent. Little in- formation on his exact duties. Age about 28. May have left Morocco now.	Tetuan	115
Kruger, Hans Paul	German vice-consul. Senior vice-consul and head of German intelligence service in Tangier. Born 28 Dec. 1903. First in Tetuan,	Tangier	116

Kruger (cont.)	moved to Tangier in April 1941 when consulate was opened there.		
Krughen, Otto	German agent. An underling. Holds Uruguay passport under name of Gruger. May be engaged in forging passports. Frequents Florida bar and seeks to pump sailors and ship officers for information. Last reported October 1941; may still be in Tangier.	Tangier	117
Lackner, Fritz	German Gestapo agent. Ostensibly employed by KRAEMER as mechanic for Mercedes Benz cars which KRAEMER used to import. He is apparently in everything and goes everywhere, but whether he is of any great use is hard to tell; the Spanish regard him as somewhat of a lunatic, according to reports.	Melilla	118
Langenheim, Adolf	German propagandist. Deals chiefly with propagandising natives. By profession is a mining engineer. His wife is Italian, named Margaret. 6 children: Heinrich (in Tetuan with wife Jean nee Beckwith), Reinhardt (in German navy), Otto (agent in Spain), Pasisi (German aviator, missing), Oswald and Margarita. Has lived in Tetuan since before the last war. Born 11 April 1872. Is director of <u>Soc. Español des Mines</u> ; natives call him BUCHARTA.	Tetuan	119
Laperna, (Mlle.)	Mistress of Hans Max BRANDT.	Tangier	120
Larbi Bursan, Mohammed	Reported pro-Allied	Tangier	121

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Larbi Tamsamani, See, Tamsamani, Caïd Sidi
Caïd Sidi Larbi

Llobet Ruiz, Mariano	Architect for the Pro- tectorate Zone. Appointed in March, 1942.	Tetuan	123
Losbacher, Ernst	German propagandist, in propaganda department of German consulate, Tangier. Age about 30.	Tangier	124
Malmusi	Judge. On Tangier Mixed Tribunal, one of 11 judges. (For list cf. Villagram.)	Tangier	126
Marchegiano	Director of Justice, held the position as of 1939; may have changed since.	Tangier	127
Massa Mas, José Luis	Chief of the section of Internal Commerce of the Delegation of Economics, Industry, and Commerce in the Protectorate Zone.	Tetuan	128
Mealín (Colonel)	Retired French Colonel. Resident of Tangier; strongly pro-American, largely because of associations with Americans in the last war.	Tangier	129
Mekki Nasiri (Muhammed al Makki an Nasiri)	Native nationalist leader. Head of the Moroccan "Unity Party", described as a Germanophile Moslem organization. His news- paper <u>Al Wahat al</u> <u>Moghrabiat</u> was suspended in May 1942 by the Spanish authorities for carrying a disparaging reference to General NOGUES. Used to be very pro-Franco, according to reports.	Tetuan	130

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Mohammed Bou Dra	Native leader. Relative of Abd el Krim. In 'Liberal' or 'Freedom' party, a conservative Moslem movement.	Tetuan	132
Moktar Ben Ali	Reported pro-Allied	Tangier	133
Money Penny	British Consul at Tetuan	Tetuan	134
Mugica, Salvador	Spanish general. Secretary-general of High Commissioner of Spanish Morocco.	Tetuan	136
Mulay, Hasan	Khalifa of Spanish Morocco. Reported as pro-Spanish, in sympathy with Axis. His son is in school in Spain.	Tetuan	137
Muller, Pierre Auguste	German agent. Frenchman, 31 years old, lives in Tangier, has sold out to the Germans and is a dangerous agent for them.	Tangier	138
Muñoz Lopez, Antonio	Judge on Regional Tribunal, Ceuta.	Ceuta	139
Mustapha Moham- med	Reported pro-Allied	Tangier	140
Mamam, David	American seamar. In 1941 was employee of Socony Vacuum Oil Co. in Tangier	Tangier	141
Nasiri, Mekki (See Mekki Naciri)			
Nassar, Abd al Salam Walad	American "special service" protégé. Father was an acrobat who became a naturalized US citizen. Son lost citizenship through change in law; pro-American always, he won "protection" status through aid and gifts to the consulate during the troubles in 1906.	Tangier	142

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Lyautey, Pierre	Nephew of famous Marshal. Reported politically a 'fence-sitter' who will turn to the winning side. Has made frequent trips to France before the Germans moved in the Unoccupied Zone. Reported increases in sabotage and discontent; nevertheless remained a Petain supporter outwardly. Frequently in Tangier.	Tangier	125
Malek Ben Abbou, Si Allal ben Abd (See Abd el Malek Ben Abbou)			
Navarro Alza, Francisco	Court official. Secretary of the Special Civil Court of Political Responsibilities.	Ceuta	143
Navas, Lieutenant	Chief of the Spanish intelligence in Tangier. In the pay of Wiedemann, the German Press Attaché.	Tangier	144
Nolte	Hotel Concierge. Reported last as of October 1941 working at Rif Hotel and informing to the Germans on residents at the Hotel. Holds a Spanish passport.	Tangier	146
Nublat, Rene Leon	Reported in October 1941 as a double-crosser, a professional spy and informant selling his services to the highest bidder. In October 1941 said to be working for the Germans. Married to an Italian woman; has been a dope peddler and passport forger.	Tangier	147
Ouazzani, Brahim el	Moderate Nationalist. Head of office of Propaganda and Information. Not much influence among Moors. In 1939 addressed violent message to President Roosevelt. Believes in Arab	Tetuan	149

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Ouazzani, Brahim el	Independence, but not in immediate future. Attended French <u>Ecole des Hautes Etudes Politiques</u> . Wrote program for the now dissolved Moroccan Independence Party.	Tetuan	149
Odriazola. Arevelo, Luis, General	Brigadier General, Chief of artillery for the Army in Spanish Morocco.	Tetuan	150
Orgaz y Yoldi, Luis	Lt. Gen. in Spanish army; high commissioner of Spain in Morocco; Commander-in-chief of Army, Navy and Airforce and head of Falange organization in Morocco; in residence at Tangier. Born in 1881, he has had a military career and long experience in Spanish Moroccan civil and military affairs. First in Morocco serving on Native Bureau, in charge of native police at Larache. 1915-16, with Native police at Ceuta. 1920-1922, as Lt. Col. serving in Ceuta-Tetuan region as commanding officer of 2nd Division composed largely of battallions of native troops. 1922-25 a Colonel with Spanish army in African campaign. 1926, raised to general by Primo de Rivera. 1932, one of leaders in revolt against Republicans. Rusticated to Canary Islands. Reinstated by and associated with Franco from the beginning of the Spanish civil war. Reorganized nationalist armies, and at end of war was in command on east front and captured Valencia. 1939, Captain General of Catalonia. 1941, in Spring, assumed present post in Morocco. A professional soldier, he has a very high military reputation in Spain.	Tetuan	151

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Orgaz y Yoldi, Luis	Politically conservative, former member of <u>Requetes</u> . One of the principal leaders of opposition to Serrano Suñer. In Morocco he failed in his efforts to reduce pressure of Moorish nationalism, finally had to adopt 'Beigbeder Policy' of appeasing the nationalist movement. Political sentiments undetermined; it is not believed, however, that he belongs to the group convinced of Axis victory.	Tetuan 151
Pancrazi	Police official. Inspector of Police in 1939, according to registry of Tangier officials. May have been replaced since.	Tangier 152
Paschkes, Ervald	Merchant of Tetuan, believed to have sold out to the Germans.	Tetuan 153
Pazalat, C.	In 1939 was listed as Chief commissioner of Police in Tangier. May have been replaced since (cf. Rodriguez)	Tangier 154
Pederson (Frdulcin)	German agent. Reported in October 1941 as attractive, speaking perfect English, well dressed, often seen in Hotel Minzah, probably Danish, also going under name of <u>Nana Kallenbach</u> .	Tangier 155
Perez, Sanchez, Colonel	Colonel, commander of the Spanish Morocco central region from Chechaouen to the Nkor river. Described as example of highest type of colonial administrator. In 1926 was captain in charge of native affairs in Beni Anert.	Villa 156 Alhucemas
Perez San- taña, Manuel	Provincial Inspector of the Court of Political Responsibilities, Ceuta	Ceuta 157

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Perez Zapata, Alfonso	Chief of Municipal Police. Melilla	158
	An oldish man. One of his daughters is married to General Sanchez Bautista, Captain General of the Balearic Islands. Another daughter, a widow, has endeavored on occasion to manifest sympathy for the Allies. His young son is foppishly dressed but well mannered. The entire family is definitely pro-Allied.	
Pfiehlen, Hans	In propaganda section of German consulate at Tetuan, as of March, 1942. About 28 years old, native of Berlin.	Tetuan 159
Pfoertzgen	Press attaché. At Tangier German legation.	Tangier 160
Pradas Arruebo, Colonel		161
(Preferred use of name above. See Arruebo Pradas, (20))		
Rafferty	Judge on Tangier Mixed Tribunal, one of 11 judges. (For list cf. Villagram)	Tangier 162
Raida	Judge on Tangier Mixed Tribunal, one of 11 judges. (For list cf. Villagram)	Tangier 163
Raisuli, Sherif el Hassan ben Hamed	American "special Service" protégé. Cousin and brother-in-law of Rif bandit chief-tain and German agent of World War I Raisuli. "Protected" because he served well in 1904 acting as go-between and confidential messenger. Said to be faithful in his attachment to the U.S.	Tetuan 164

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Recke, Johann	Also known as Don Miguel de Rincon. Official military representative of the German Government to Spanish Morocco. A German Lt. Col. of Aviation. Head of the German Intelligence system in the Protectorate. His superior is said to be Gustav Lenz in Spain. Recke has about 60 agents working under him; has an office in the German consulate. Born in Tetuan December 4, 1894, he is 5'8", well-built, grey hair, his wife is a brunette. Owns a Scotty dog and a Peugeot car license 1.480.	Tetuan 165
Redondo Romero, Jose, General	Recently promoted from rank of colonel to general. Stationed at Melilla under General Valino. Has acted as Governor of Melilla in absence of Serrano and Valino.	Melilla 166
Reith, Kurt Heinrich (Dr.)	German Consul-General. Appointed to succeed Noehring July 2, 1942. Extremely active. Announced upon arrival that "Germany has no political interests to pursue in Tangier or Morocco." Reported to be in good graces of General Uriate. Reported to have a guard of 40 German soldiers; machine guns and German army uniforms kept stored in the German legation.	Tangier 166a
Renschausen, Adolfo	German consul in Larache. Senior partner of the firm <u>Renschausen & co.</u> , a firm used to cover for the employment of German agents in Larache. A native of Berlin, he was last there October 1937. Born July 24, 1867. Reportedly for years the ringleader for propaganda activities by the Axis in Spanish Morocco.	Larache 16'

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Reyes y Cruz, Casimiro	German agent. A Spaniard, paymaster and contact man for Adolf Langenheim among Arabs.	Tetuan	168
Ribella, Emmanuele Filiberto	Italian vice-consul at Melilla. A tall, youngish man, apparently with no particular occupation. Spends his time with Spanish military men and particularly with the Secret Service crowd.	Melilla	169
Ribes, C.	French Consul at Melilla. An ardent Vichy supporter.	Melilla	170
Ribbi, Haim	A Jew who, with his father, served as agent for Captain UVA, late Italian Intelligence Chief at Tangier.	Tangier	171
Richard, René	Honorary Peruvian consul in Tangier. A Frenchman, a thoroughgoing collaborationist. Close to Germans; may be selling Peruvian passports to German agents.	Tangier	172
Richter, Ernst (Dr.)	A career diplomat, German consul at Tetuan. Born July 30, 1899. Married, has small daughter aged 4 years. Supposedly not a member of Nazi party. Last report on him as of March 1942.	Tetuan	173
Rios Capape, Joaquin, General	Spanish General, commander of the 91st Division to which position he was appointed in February 1941. Also Military commander of Tetuan. He was born in Figueras in 1898 or 1899, was a Lt. Col. in Franco's army in the Civil war, commander in the University City area. He was one of the earliest supporters of Franco. In March 1939 he was the first Franco soldier to set foot inside Madrid; he was accompanied only by a Moorish private.	Tetuan	174

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Ritter, Paul	Now employed at the German consulate, Tetuan, especially to deal with Jews who call there.	Tetuan 175
R'Kaina, Abdelak	Native leader. Reported pro-Allied. Holder of membership in French Legion d'Honneur. Chairman of an Arab Relief Society.	Tangier 176
Rodriguez	Chief of Spanish Police in Tangier. Said to receive regular remittances from Wiedemann, the German Press Attache at Tangier.	Tangier 177

Salama, Jacob de J.	Merchant. Head of <u>Jacob de J. Salama Co., Lloyd's sub-agents for W. Calver & Co., Liverpool.</u> Has two brothers (Isaac and Samuel) who speak English. All are prominent members of Jewish colony at Melilla.	Melilla (178)
Sanchez	Italian agent, a Spaniard in the Italian Intelligence service; co-editor with Garassino of Spanish language newspaper "Informacion."	Tangier (179)
Sanchez(General)	Spanish officer. General Spanish army, commanding officer at Melilla.	Melilla (180)
San Padro(General)	Spanish General. Commander of the 102nd Division of the 10th Army Corps. Lately risen from the rank of Colonel.	Melilla (181)
Schichtig, Karl	German agent. Subordinate to Renschhausen and employed by him. In 1938 reported to be one of the German propaganda chiefs in Spanish Morocco.	Tetuan (183)
Schnitzler, Rodolfo	German purchasing agent. Residence at the Hotel Rif; sometimes stays at the Minzah Hotel under the name of Smada.	Tangier (184)
Schmiedo, Otto	German consular official. Military Attaché at the German consulate, Tetuan. Member of the Gestapo. Residence, #8 calle Valparaiso. 33 years old.	Tetuan (185)
Schroeder, H.F.	German Gestapo agent. Former leader of Hitler Youth camps in Stockholm but expelled from the country for immorality. Now a Gestapo agent (last reported April 1942) working in Tetuan.	Tetuan (186)

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Schultz, Hans	German political agent. Reported as of March, 1942, as Gauleiter for Spanish Morocco. About 35 years old. Has a private commercial agency business on the side.	Tetuan	(187)
Slawi, Haman ben Thamy	American "special service" protégé. Second son of Thamy ben Hamman Slawi. Bright and intelligent.	El-Ksar-el Kebir	(188)
Slawi, Thamy ben Haman	American "signal service" protégé. About 90 years old, mentally alert but of failing eyesight. Lives in comparative ease. Owes his "protection" status to saving the life of an American painter, Sewall, 45 years ago. His two sons (Hamed ben Thamy & Hamman be Thamy) are also protégés.	El-Ksar-el Kebir	(190)
Soudan	On Tangier Mixed Tribunal, one of 11 judges. (For list cf. Villagram)	Tangier	(191)
Sousi, Ali ben Mohammed ben Omar	American mohalat. In 1941 was employed by the Socony Vacuum Oil Co., Larache.	Larache	(192)
Such Martin, Juan	On Special civil court of Political Responsibilities, Ceuta.	Ceuta	(193)
Takieddin el Hilali, (Dr.)	German propagandist. An Arab from Tafelat in French Morocco. Of poor Moorish stock. He has travelled extensively in the Arab world, and has lived in Egypt, Syria, Palestine, Persia, and British India. He knows the Islamic world well and has a sizeable personal following who believe him a holy man. He spent the last 3 years in Berlin where he was well treated. Recently he returned to Tetuan to organize German propaganda to the natives. Speaks over local Axis radio stations.	Tetuan	(194)

Tanjawi, Mohammed dl-Mandani el- Kurein	American mohalat. In 1941 was employed by the Socony-Vacuum Oil Co., Tangier.	Tangier (195)
Taurll, Abraham de David	Merchant. Prominent member of Jewish colony, Melilla.	Melilla (196)
Temsamani, Moham- med ben Si Ahmed	Reported pro-Allied	Tangier (197)
Temsamani, Si Mohamed	Reported pro-Allied	Tangier (198)
Temsamani, Caid Sidi Larbi	Pasha of Tangier. Appointed 16 Mar. 1941 to replace the Mendoub whose functions he assumed without the title Mendoub. Supported by the Spanish.	Tangier (199)
Tmimi. Ali ben	American semsar. Employee of Socony Vacuum Oil Co., in Larache, 1941	Larache (200)
Torrejon Montero, Alejandro	Engineer. Chief engineer for Agronomic Service, appointed March, 1942.	Tetuan (201)
Torres, Abd el Khalek	Native nationalist leader. Head of the <u>Watanis</u> , native nationalist party. Reported being used by Germans to spread propaganda and unrest in the country.	Tetuan (202)
Ulargi, Genesio	Italian intelligence officer. Formerly in Paris; now liaison officer between Italian and German commissions in Tangier.	Tangier (205)
Ulrich, Otto	German agent. Local head of the nazi party in Ceuta.	Ceuta (206)
Uriarte(General)	Spanish General. Dele- gate to Tangier of General Orgaz. Reported as some- what pro-Allied, and confi- dent that U.S. will ulti- mately win the war.	Tangier (207)

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Valazco, Don
 Jose

Spanish lawyer.
 Officially secretary
 to Delegacion de Gobierno.
 An educated Spaniard, law-
 yer by profession; rather
 fed up with military men
 and by lack of money. A
 youngish man, rather more
 pro-Allied than anti.

Melilla (209)

Valino Raphael
 y Marcen, Garcia

Spanish General.
 Former commander-in-chief
 of the 10th Army Corps,
 with official title Jefe
 del Cuorpo de Ejercito del
 Maestrazgo y Delegado del
 Gobierno. Melilla's no. 1
 citizen. General of Divi-
 sion and counsellor of Span-
 ish Junta Politica. A strong
 Falangist. Young in years for
 the position he holds. Nick-
 named "the Butcher" for his
 complete disregard of soldiers'
 lives, both in the Rif campaign
 and in the Civil War. Smallish
 in stature, somewhat plump; suave,
 slightly bald. In looks rather
 like Franco but not so fat. Pro-
 fiteers in his administering at
 Melilla. Since October 1942 he
 has been Chief of Staff of Spanish
 army; whether still in Spanish
 Morocco is not known.

Melilla (210)

Villagram

Judge. On Tangier Mixed
 Tribunal. In 1939 the
 roster of the Tribunal was:
 Bevilacqua, Ceballos, Delore,
 Delye, Diaz Merry, Galibert,
 Mahmusi, Rafferty, Raida, Soudan
 and Villagram.

Tangier (211)

Vincigerra (Comman-
 dante)

Italian Commandante. Mili-
 tary Attaché at Tangier and
 head of the Ovra for Spanish
 Morocco. Residence in Rif
 Hotel.

Tangier (212)

Wazzani

(See Ouazzani)

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Wiedemann, Otto von	Chief German propagandist. Tangier (214) Officially the Press Attache at the consulate in Tangier. Speaks Arab fluently; or- ganized the native demon- strations after the bomb ex- plosion in Tangier in February, 1942. Transferred from Tetuan to Tangiers. Has many agents working for him and directly paid by him.
Wilmer, Herbert	German propagandist. An Larache (215) exporter by trade, he is one of the agents responsible to Renschausen at Larache. In 1938 he was reported to be the head of the German propaganda organization in Larache.
Yague	Spanish General. Newly- Melilla (216) appointed (Nov., 1942) commander in chief of the 10th Army Corps, also exercises the functions of Military Commander of Sevilla. One of the leading Nationalist generals in the Spanish Civil War. After the war and until his present appointment he held the Air portfolio in the Franco Government.
Yrassarri, Don Luis de	Local judge in Melilla. Melilla (217) Shipping agent on the side for Ybarra S.S. Co. An ardent fascist and friendly with the Italians in Melilla. His son is a sergeant in the Division Azul.
Yuste, Antonio (Col.)	Spanish Colonel. In Tangier (218) charge of Spanish occu- pation of the Tangier Inter- national Zone. Has carried through the progressive closure of existing inter- national institutions in the Zone.

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HEALTH CONDITIONS
IN
SPANISH MOROCCO AND THE TANGIER ZONE

(Written under the direction of the
Surgeon General's Office)

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I. Diseases.

A. General.

Very little information has been recorded concerning disease conditions in Spanish Morocco and Tangier. In general, however, diseases and disease problems are essentially the same as in other parts of Northwest Africa.

The diseases that will be of greatest importance to a military force operating in this area are malaria, typhus fevers, enteric diseases (typhoid fever, paratyphoid fevers, anebic dysentery, and bacillary dysentery), non-specific diarrhoeas, venereal diseases, sandfly fever, and dengue fevers.

Diseases of potential military importance are relapsing fever, eruptive fevers of the Mediterranean (tick-borne fièvre boutonneuse), urinary schistosomiasis, plague, and skin diseases, especially fungus infections, wound infections, and tropical sores and ulcers. Kala azar (visceral leishmaniasis) and oriental sore (cutaneous leishmaniasis) are widely distributed and occasional sores are to be encountered. Dracunculiasis (guinea worm) is not uncommon. The acute infections and contagious respiratory diseases that are commonly encountered in the United States also occur in this area, and some, particularly small-pox and cerebrospinal meningitis, are unusually prevalent.

B. Specific Diseases.

1. Malaria. Malaria is widely distributed and is

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the principal disease problem in Spanish Morocco during the long spring and summer; it is not quite so severe in Tangier. It is the greatest single cause of morbidity and ordinarily is responsible for 30 to 40 percent of all hospital admissions. Infection rates among Spanish troops during recent years have varied between 13 and 67 per 1,000 troops.

Anopheles maculipennis, labranchiae is the most important vector of malaria in this region. It is found in abundance along the coast, the coastal plains, swampy areas, and the slow moving rivers. This mosquito breeds in a great variety of waters ranging from strongly brackish coastal marshes to gravelly inland streams. Adult mosquitoes have an effective flight range of three to four miles and bite man by choice. During the winter this mosquito hibernates in houses, sheds, and caves and is responsible for the occurrence of "winter malaria". Anopheles hispaniola, A. bifurcatus, and A. sergenti are also found in this area but are not considered important vectors of malaria. Because of the prevalence of malaria the persistent application of mosquito control measures is considered a necessity. In highly endemic areas suppressive treatment is considered advisable.

2. Typhus fevers. Louse-borne typhus fever is both endemic and epidemic and during the winter and spring constitutes an extremely serious health hazard. This disease is much more common in this area than in any other Mediterranean country. It is particularly prevalent in the coastal towns but also occurs in inland towns and among the rural

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and nomadic population. Lousiness, due to the body louse (Pediculus humanic corporus) is very general among the many impoverished natives and is conducive to the perpetuation and dissemination of epidemic typhus fever. Because of prevalence of lice and epidemicity of typhus fever, facilities for the delousing of clothing are considered a necessity and strict personal cleanliness should be observed. The danger of frequenting native habitations and/or gathering places must be emphasized. Endemic or flea-borne typhus fever is also encountered but is not nearly so significant nor so great a problem as is the louse-borne variety. A form of tick-borne typhus fever (eruptive fever, fièvre boutonneuse), due to the bite of the dog tick (Rhipicephalus sanguineus) is not uncommon during the summer months.

3. Enteric diseases. With few exceptions most of the water supplies throughout this area are subject to contamination with human excrement and, as a result, enteric diseases (typhoid fever, paratyphoid fevers, amebic dysentery, bacillary dysentery) are prevalent. Amebic dysentery is reported to be highly endemic at all times, and sporadic epidemics of typhoid fever are of frequent occurrence. It is believed that the lack of proper facilities for sewage disposal and the failure to enforce regulations pertaining to the inspections of foods, food handlers, and food vendors materially increases the incidence of these diseases. The occurrence of non-specific diarrhoeas, due to food spoilage and/or salmonella infections, are especially common among the

newcomers in this region. The unusual prevalence of flies and their great importance as mechanical carriers of these diseases of filth cannot be over-emphasized. It is especially important that all water supplied in this area should be purified, that plans should be made for the proper disposal of all human excrement, that fly control measures be persistently carried out, and that measures be employed to assure the safety of meats, milk, and other foods.

4. Venereal Diseases. Venereal diseases, particularly syphilis, gonorrhea, and lymphopathia venereum, are unusually prevalent and are responsible for a large proportion of the admissions to all hospitals. There is said to be considerable prostitution, and, so far as is known, no control measures are employed. The incidence of venereal diseases among prostitutes is high.

5. Sandfly Fever. Sandfly fever (*papatasii* fever or three-day fever), due to the bite of an infected sandfly (*Phlebotomus papatasii*), is of comparatively frequent occurrence among the recently arrived in this region. Though this disease is rarely fatal, it is of especial importance to a military force for it strikes suddenly, temporarily incapacitating a large number of troops. Of additional importance is the fact that the short, acute phase of the illness is frequently followed by a protracted convalescence.

6. Dengue Fever. Dengue fever (breakbone fever or seven-day fever), due to the bite of an infected *Aedes aegypti* mosquito, is endemic in this area and frequently

occurs among the new and non-immune arrivals. The significance of this disease from the military standpoint is the same as that of sandfly fever (see above).

7. Relapsing Fever. The vectors of relapsing fever, the body louse (Pediculus humanus corporis) and the tick (Ornithodoros erraticus), abound throughout Morocco, but neither the epidemic louse-borne relapsing fever nor the sporadic tick-borne relapsing fever have occurred in serious epidemic proportions during recent years. The tick-borne variety is the more common, and it is possible that small outbreaks may occur among men who sleep or take up quarters in caves.

8. Plague. Plague is endemic throughout this region and in the past has given rise to great epidemics. The disease is reported from all parts of the territory and is quite frequent in the port towns. Both the bubonic and pneumonic forms are reported. The large rat (Rattus rattus and R. norvegicus) and flea (Xenopsylla cheopis) population, particularly in the ports, creates a situation that is conducive to the perpetuation and spread of plague. The occurrence of this disease far inland suggests that it has become established among wild rodents. Because of the prevalence of rats buildings should be of rat-proof construction, and rodent control campaigns should be persistently carried out if the threat of plague is to be minimized.

9. Schistosomiasis. The urinary form of schistosomiasis (bilharziasis) is widely distributed throughout this

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region, and in certain localities the rate of infection is extremely high. This is especially true in the immediate proximity of slow moving rivers or large marshes. The disease is contracted as the result of wading, bathing, washing, or drinking water that contains the cercariae of the blood flukes (Schistosoma haematobium) and their snail hosts. In these localities stagnant or slow moving bodies of water should be investigated for the presence of these flukes before bathing and washing are permitted.

10. Leishmaniasis. Both visceral leishmaniasis (kala azar) and dermal leishmaniasis (oriental sore) are widely distributed throughout Morocco, but both forms of the disease are of infrequent occurrence in man. The vectors of these diseases, sandflies (Phlebotomus, spp.), occur in considerable numbers and it is probable that occasional cases of leishmaniasis may be encountered.

11. Myiasis. Myiasis is encountered and may occasion a considerable amount of serious injury. This disease develops as the result of the deposition of the maggots of a large grey fly (Wohlfahrtia magnifica) in wounds and cuts. The maggots destroy tissues with great rapidity, and secondary infections of the lesions and sepsis are common.

12. Guinea worm. Guinea worm infestation (Dracunculiasis) is not uncommon in French Morocco and it is probable that it also occurs in Spanish Morocco. This disease results from swallowing water that contains the tiny

crustacean Cyclops, which is the intermediary host of the causative organism (Dracunulus modinensis).

13. Dermatological Disorders. In addition to the dermatological disorders mentioned above, fungus infection of the skin, secondary infection of wounds, and parasitism are extremely common and are capable of causing considerable morbidity among white personnel. The bites of many of the parasitic insects cause intense itching and scratching; this is particularly true of lice, scabies, human fleas, mosquitoes, straw mites, and blackflies. As the result of scratching and excoriation serious secondary infections of the scratch wounds may occur.

14. Eye Disease. Gonorrheal ophthalmia, trachoma and pink eye are common. The disease can be carried and transmitted by flies and other insects.

15. Yellow Fever. Although yellow fever has not occurred in Spanish Morocco or Tangier the mosquito vector (Aedes aegypti) of this disease is present. It is entirely possible that this disease could be introduced into this region by the transportation of infected persons and/or mosquitoes from the highly endemic areas of central Africa.

II. Medical Facilities.¹

Medical facilities in Spanish Morocco are extremely inadequate and are limited to 18 hospitals, and six or more

¹Except where otherwise noted all information is from ISIS, Northwest Africa, May 1942, pp. 61-62.

dispensaries distributed among the principal towns. The largest hospitals are located in Ceuta, Tetuan, and Melilla, but the equipment of these and all other hospitals in the Spanish Zone is believed to be poor and inferior to that in French Moroccan institutions. Conditions in Tangier are somewhat better in that there are known to be three fairly modern hospitals, but the total bed space is small.

A. Tangier

1. Hospitals and Clinics

a. Tulloch Memorial Hospital (English). A small modern hospital of about 40-bed capacity, possessing an operating theater and X-ray facilities. It is located north of the sports grounds on Meseta del Marxan.

b. French Hospital, 50 beds, operating theater, X-ray equipment. It is situated between the Calle Garibaldi and the north coast.

c. Italian Hospital, 30 to 40 beds, very modern equipment (no details). It is situated on the Calle Sidi Marrakia south of the Italian school.

d. Benchimol Hospital (Jewish), said to be small, no information on equipment. It is situated on the Calle de Alejandria, near the Italian school.

e. Spanish Hospital, about 60 beds, antiquated equipment. It is situated on the Calle San Francisco, west of the British Consulate General.

f. Isolation hospital, about 3½ miles east of town. No details available.

g. English clinic, very small, only about 6

beds but with good operating equipment and facilities (no details).

2. Dispensaries.

a. Municipal dispensary, close inside Maroni Gate, behind the Innu Harbor, no information available concerning services rendered.

b. Red Cross (Spanish) dispensary, north of east end of Calle Portugal.

3. Laboratories.

a. Pasteur Institute, bacteriological research, situated on Meseta del Marxan.

B. Alhucemas (Villa Sanjurjo).

1. Hospitals.

a. Military hospital (name and details unknown), south end of town, west side of road to Axdir (Ajdir) and Melilla.

b. Red Cross hospital, about 400 yards southeast of military hospital.

C. Arcila.

The one hospital reported faces the beach, 200 yards northwest of Plaza del Consul Alvarez Buylla.

D. Ceuta.

1. Hospital O'Donnell (military hospital), a large group of buildings, about a mile southwest of the Muelle de Espana. No details on bed capacity, equipment, or facilities.

2. Civil Hospital, on Calle Soberania Nacional. No

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details of any kind available.

E. El Ksar el Kbir (Alcazarquivir).

1. Hospital, northeast of the barracks area. No details available.

2. Native infirmary, in Bab-el-Ued, south of Plaza Muley el Mehdi.

F. Iles Charafinas (Islas Charafinas)

1. Military hospital on Isakel II Island. No details available.

G. Larache.

1. Hospitals.

a. Military hospital, located in the Kehibat an old fortress at the northwestern extremity of the old town. No details on equipment, facilities, or bed capacity.

b. Civil hospital, near the port railway station on the Tangier road. No details available.

c. Military transport buildings at north end of the town was adapted for hospital use in July 1942 and 100 beds installed.¹

2. Dispensary reported but location and services unknown.

H. Melilla

1. Hospitals.

a. Pages Hospital (military), several buildings

¹Naval Attaché, Tangier, 19 August 1942, O.S.S. Accession 20636.

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1800 beds, no details on equipment.¹

b. Red Cross Hospital, about 300 beds, no further details, situated south of Calle de Garcia Hernandez.

c. Hospital (name and details unknown), about 300 yards northwest of Fuerte de Camellos.

d. Hospital (name and details unknown), near the Jewish quarter on the northern outskirts of town.

e. Hospital (name and details unknown), reported small, situated in the northeastern corner of the old town.

2. Dispensary: a first aid post reported on the west side of Calle de Garcia Aldave, 250 yards southwest of Plaza de Espana.

I. Nador.

1. Hospitals.

a. Military hospital reported (details and location unknown).

b. Civil hospital, near the junction of the roads to Segangen and Zeluan, capacity and equipment unknown

J. Tetuan.

1. Hospitals.

a. Military hospital, reported to be large and very good, but no details available. It is situated west of the town, near west end of Carreterra de Tangier.

b. Civil hospital (name and details unknown),

¹Military Attaché, Tangier, 15 April 1942.

situated about $\frac{1}{2}$ mile east of the town, north of the road to Rio Martin.

2. Dispensaries.

a. Municipal dispensary, Calle de Consul Zugusti, nearly opposite Puerta Tangier. No information concerning services rendered.

b. Three other dispensaries reported, but details and locations unknown.

K. Xauen (Chechaouene).

1. No hospitals reported.

2. Municipal dispensary, 100 yards southwest of the western gate of the old town. No details on services rendered.

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TOWN WATER SUPPLIES
OF
SPANISH MOROCCO
AND THE TANGIER ZONE

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TOWN WATER SUPPLIES

Information concerning organized water supplies is available for the following towns of Spanish Morocco, including Tangier. Some of the sources are old and may no longer be accurate. In most cases the towns are supplied by springs, although Alhucemas obtains its water from the Oued Ghis.

The towns are presented alphabetically:

1. Alhucemas
2. Arcila
3. Ceuta
4. Chechaouene (Xauen)
5. El Ksar el Kebir (Alcazerquivir)
6. Larache
7. Melilla
8. Nador
9. Peñon de Velez de la Gomera
10. Tangier
11. Tetuan.

1. Alhucemas, population 6,100, including 4,450 Spanish.

The water supply is obtained from the Oued Ghis. A station near the river mouth on the west bank pumps the water to a point two miles southeast of Alhucemas, where there is a filtering plant with two small white beehive cisterns, just visible from the sea. Water is conveyed from the filtering plant to Alhucemas in small pipes which are laid above ground. In addition a pipe bringing water from a

¹ "Las obras publicas en el Marruecos Español", Africa, March 1929, p. 62; C.B. 4096 E, ISIS Report on Northwest Africa (May 1942); NID, Geographical Handbook Series: Morocco, Vol. II (not yet published); U. S. Consul, Tangier, "Data on Weather Factors and Water Supply at Tangier", July 19, 1938; Military Attaché, Tangier, November 28, 1941, April 16, 1942, February 24, 1942.

spring leads down to the filtering and distribution point, but the supply is not permanent and the spring is of little use. The water is sometimes rationed. (No further details on quantity of supply). It is reported to be fit for drinking.

2. Arcila, population about 5,300, including 1,100 Spanish.

Springs to the east of town supply a reservoir which has a capacity of 137,175 gallons. The supply is reported to be scarce (no details as to quantity of supply).

3. Ceuta, population 50,293, almost entirely Spanish.

Water is obtained from springs in the hills to the southwest, where it is collected in a reservoir and piped into town. There is no pumping plant as the water flows by gravity. The pipes lead under the road bridge (Puente del Cristo) across the canal cut through the isthmus at the western entry of the town. The supply is rationed in the summer (no further details on quantity of supply). Water is reported to be pure but hard.

4. Chechaouene (Xauen), population 6,065.

There is a good water supply from the springs of Ras el Ma, outside the east gate of the old town. (No details on quantity of supply).

5. El Ksar el Kebir (Alcazarquivir), population 30,762, including about 3,000 Europeans.

A "moderate" supply is provided by a reservoir with

a capacity of 1,057,500 gallons, fed by the spring of Smid el Ma.

6. Larache, population 29,477, including 10,000 Europeans.

An abundant supply is obtained from springs at Sajsog, 5 miles south of Larache on the road to El Ksar el Kebir. The pumping station, one or two miles from the springs, pumps the water up to a large reservoir, capacity 255,150 gallons, at Alcantara, on the eastern side of the road. The water is reported to be fit for drinking and the supply unlimited.

7. Melilla, population 69,000, almost entirely Spanish.

Source: Yasinen springs in hills to the west of town. Forty years ago the water came out very hot, but now it is fairly cool at the springs.

Distribution: Water is piped down to two white beehive cisterns on the hill near Fuerte de Camellos (reported by aerial photography to be 40 feet in diameter). Water is also piped from a reservoir at the north end of town. It has been reported that dry dams are being built to store water. Water is distributed by gravity; there are no pumps. Water is piped through much of the town, and houses lacking a piped supply are supplied daily from water-carts. In addition recent aerial photographs indicate one 20-foot diameter tank at the artillery depot and two 20-foot diameter open tanks at the railroad repair shops.

Quality and Quantity of Supply: The water has

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been reported as fit for drinking although recently it has been said to be bad. It has mineral properties. The supply does not have to be rationed.

8. Nador, population 7,400, largely Spanish.

Water is piped into town from springs in the hills to the west. It is reported to be fit for drinking.

9. Peñon de Velez de la Gomera, population about 500.

Water is supplied from rain-water tanks, but has to be imported in dry years.

10. Tangier, population 62,000, including 17,000 Europeans.

Source: An excellent unrationed supply is obtained from springs at Sharf el Akab, 11 miles south of town on the road to Larache. The temperature of the water at source is constant at 66° F. The springs have a 6-inch bore pipe, 560 feet deep. The artesian pressure is insufficient, and a pump is fitted into the springs. The Cap Spartel area is abundantly supplied from two sets of springs one of which is heavily impregnated with iron.

Distribution: There are a reservoir, capacity 211,875 gallons, and a small tank at the springs. Water is pumped from the springs to a large covered reservoir, capacity 264,870 gallons, surrounded by trees at Dzar el Branez, 3½ miles southwest of town, through steel pipes buried at 5 feet. Part of the water descends to the town by gravity, and part is pumped to a tank on Meseta del Marxan,

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capacity 105,938 gallons, to supply the higher parts of town. The pumping station at Sharf el Akab and that which pumps the water on to Meseta del Marxan use electricity from Tangier; the cables are carried by telegraph poles. There are several public fountains from which the Moors obtain water free. Only about one-third of the houses are on the water supply.

Quantity of Supply: It is reported that the water is never rationed. The average daily per capita consumption of water is 11 gallons.

Quality of Supply: The supply is not treated as the water is said to be bacteriologically pure. However, water distributed in the native quarter has recently been reported to be dangerously polluted. In 1936 the supply was analyzed as follows: alkalinity (in CaCO_3), 0.235; chlorides, 0.081; organic material, 0.001; CaO , 0.112; MgO , 0.014; sulphates, 0.009.

11. Tetuan, population 49,535, including 17,000 Europeans.

Source: Water is obtained from springs in the hills near the villages of Jiati and Yarguit (Beni Hozmar), 4 miles to the southeast (at an elevation of 197 feet above the Plaza de Alfonso XIII, and from the Barranco del Mers.

Distribution: Water from the springs at Yarguit is conducted by a covered canal to Torreta del Mers, crossing the deep gorge of Beni Salah by means of a syphon 1,150 feet long. At the Torreto del Mers it is joined by water

from the Oued Mers in a reservoir, capacity 105,975 gallons. From this it is pumped by an electric pump across the valley of the Martin in concrete pipes, crossing the Oued Martin by a long aqueduct, and supplying the reservoir on the hillside at Dersa, capacity 2,542,800 gallons, northwest of Tetuan and 130 feet above the Plaza de Alfonso XIII. From this reservoir water is distributed in town through iron pipes.

Quantity and Quality of Supply: The water is reported to be good, but is rationed in the summer. In 1929 the system could supply, in full operation, 26 gallons a second.

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BULK FUEL STORAGE IN SPANISH MOROCCO
AND THE TANGIER ZONE

BULK FUEL STORAGE

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Tank storage installations in Spanish Morocco are probably limited to Ceuta, Melilla, and Tangier, although it is possible that there are tanks at Larache and Tetuan. In addition to tanks, it was estimated, in November 1941, there were in Spanish Morocco and Tangier 12,000 heavy drums of 200 liters capacity, or sufficient to store about 2,000 tons of gasoline, and perhaps 3,000 or 4,000 light drums of 200 liters capacity. The drums are reported to be old, and a normal leakage of one-half percent is assumed.¹

The information on tankage for the following towns has been obtained from several sources, and the figures in several cases do not agree. In most instances the differences are not great, and for Tangier and Melilla figures in both tons and gallons are given by way of illustration. The towns are presented alphabetically.

1. Alhucenas²

Fuel storage only in drums. A stock of 2,600 gallons of gasoline in drums reported in May 1942.

2. Arcila

Fuel storage only in drums.

¹U.S. Consul, Tangier, #457 Nov. 26, 1941, "Stocks of Gasoline and certain related strategic products in the Spanish zone of Morocco and Tangier." (OSS, CID, #21533C).

²U.S. Consul, Tangier, #747, May 7, 1942 (OSS, CID, #21530C)

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3. Ceuta¹

Five fuel storage tanks, the installation of the Ybarrola company, are located about 300 yard south-west of the Digue de Poniente. There are three large tanks of 8,000 long tons capacity each and two smaller tanks of 4,000 tons each, with a total capacity of 32,000 tons. (A report of January 1942, based upon aerial photography, indicates, however, that there are only two large tanks and three small tanks).

There are four settling tanks (possibly service tanks), of 200 tons each, a 12 ton service tank, and a pumping station. Two 10" pipes run to the oiling berth on the western mole, with a pumping capacity of 300 tons per hour.

In May 1942 the following petroleum stores in drums were reported at Ceuta:

Civil:	Gasoline:	2050 drums holding	108,000 gals.
	Benzol:	150 drums holding	8,000 "
	Kerosene:	10 " "	500 "
Military:			
	Gasoline:	10,000 " "	340,000 "
	Lubricating		
	oil:	----- " "	23,500 kilo-grams

4. Larache²

It is reported that fuel storage is only in drums. Recent aerial photographs (exact date not known), however, indicate two possible fuel storage tanks situated

¹C.B. 4096 E, ISIS Report on North-West Africa (May 1942) Resources, p. 14; Army Air Force, Photo Intelligence, Report #14, Ceuta, July 16, 1942 (OSS, CID #20352 C); U.S. Consul. Tangier, #457 May 7, 1942.

²Army Air Force, Photo Intelligence, Report #41, Larache, Aug 10, 1942 (OSS CID, #20358 C); Tangier, #457, May 7, 1942.

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1,100 feet south of the railroad station.

In May 1942 a stock of 127,000 gallons of gasoline in drums was reported.

5. Melilla¹

The Shell installation is situated on the western outskirts of Melilla, just south of the Rio de Oro. Tankage is as follows: (1) according to a British Intelligence report of May 1942, and (2) according to an American consular report of November 1941).

(1)

Gas oil	1 tank, capacity	2,720	long tons
" "	1 tank, capacity	444	" "
Kerosene	1 " "	428	" "
Gasoline	1 " "	386	" "
"	1 " "	386	" "
Total		4,364	" "

(2)

Gasoline and oil	1 tank, capacity	844,300	gallons
Black or white products	1 " "	112,200	"
"	1 " "	112,200	"
"	1 " "	112,200	"
"	1 " "	112,200	"
Total		1,293,600	gallons

There are also three settling tanks of 45 tons each and a pumping plant. The installation is connected to the harbor mole by two pipe lines, one 6" for gasoline and

¹C.B. 4096 E, cited, p. 14; Tangier, #457, Nov. 26, 1941; C.B. 04096 E, ISIS Report on Tangier, Spanish and French Morocco, Nov. 1940, p. 183; M/A, Tangier, #394, April 15, 1942; Army Air Force, Photo Intelligence, Report #9, Melill April 15, 1942; Tangier, #747, May 7, 1942.

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one 8" for oil. These pipe lines are underground and follow the line of the Parque Hernandez and Plaza de España to the quays. In 1940 no pumps were fitted to these pipes, and the supply to the harbor was by gravity only: 70 tons per hour for gas oil and 50 tons per hour for gasoline. It was reported in April 1942 that the Shell Company does not do any business now and that its plant is run by the Atlas Company and is indirectly controlled by the military authorities.

In addition to the above installations, it was indicated by aerial photograph, in January 1942, that two tanks 30 feet in diameter, with an estimated capacity of 3,200 bbls, each, were located at the railway repair shops. These tanks, however, are reported to be rusted and useless.

Besides storage tanks there are three main warehouses for storing gasoline, oils, and fuel oils in drums. These are situated just outside Melilla on the main road to Nador, alongside the Hipica race course. The warehouses, formerly operated by the Atlas, Vacuum, and Atlantic oil companies, are now run by the military authorities. In May 1942 the following petroleum stocks in drums were reported at Melilla:

Civil:	Aviation gasoline,	10	drums	holding	500	gallons
	Gasoline	1040	"	"	56,000	"
	Kerosene	38	"	"	2,000	"
	Gas oil and fuel					
	oil	177	"	"	9,400	"
Military:	Aviation gasoline	600	"	"	31,000	"

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6. Tangier¹

The Shell installation is situated at the head of the northern mole of the inner harbor, adjacent to the asphalt-mixing plant. Tankage is as follows: (1) according to a British Intelligence report of May 1942, and (2) according to an American Consular report of November 1941):

(1)

Gasoline,	1 tank,	capacity	567	long tons
"	1 "	"	315	" "
Kerosene	1 "	"	353	" "
Gas oil	1 "	"	1,776	" "
" "	1 "	"	<u>739</u>	" "
Total			3,800	" "

(2)

1 tank,	capacity,	224,400	gallons	for white pro
				ducts
1 "	"	118,800	"	" "
1 "	"	118,800	"	" "
1 "	"	660,000	"	" black pro
				ducts
1 "	"	<u>264,000</u>	"	" "
Total		1,386,000	"	

(The American report also includes a second tank of 660,000 gallons capacity, but this is almost certainly an error, since recent aerial photographs reveal only five tanks).

Three service tanks have a total capacity of about 23 tons. Two pipe lines connect the installation with the port, one for fuel oil #1 and one for fuel oil #2. There is also a pipe line for gas oil which, in 1941, was being repaired or altered.

¹C.B. 4096 E, cited, p. 14; Tangier #457, Nov. 26, 1941.

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7. Tetuan¹

Underground tanks of unknown capacity are reported to exist at the airdrome, 110 yards due north of the hangars and workshops.

In May 1942 the following petroleum stocks in drums were reported at Tetuan:

Civil:	Gasoline	2,500 drums;	capacity 134,000 ga
	Kerosene	55 drums,	" 3,000 "
Military:	300,000 gallons of gasoline in old leaky barrels whose nominal capacity was 430,000 gallons.		

¹C.B. 4096 E, p. 14; Tangier, #747, May 7, 1942.

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ELECTRIC POWER IN
SPANISH MOROCCO AND TANGIER

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ELECTRIC POWER IN SPANISH MOROCCO AND TANGIER

Spanish Morocco has two electric supply networks: 1,

The larger one covering the principal towns in the western area, fed by the hydroelectric station on the Oued el Lau.²⁾ A smaller network supplying Melilla and the mining region to the south. The information on these supplies is divided into three sections: 1) The electrical transmission lines and general characteristics of the supply; 2) Details of the two important power stations; 3) A description of the electrical installations in those towns which have some type of generator or important sub-station. In most cases these are small diesel plants, used primarily as reserves.

I. Transmission Lines, and Characteristics of the Current¹

The electric power network in western Spanish Morocco is fed by the hydro-electric plant on the Oued el Lau 8 miles north of Chechaouene (Xauen). A high tension line at 66,000 volts (possibly 60,000 volts) leads from the plant north to Tetuan. From Tetuan branches, also at 66,000 volts, lead to Ceuta and to Tangier. The latter line is double as far as Llano, (probably about 17 miles west of Tetuan) and there is a 66,000 volt branch from Llano to Larache. The main lines are carried on steel lattice poles 30-40 feet high.

There are secondary lines at 15,000 volts from Larache to Arcila, from Larache to El Ksar el Kebir (Alcazarquivir), from Tetuan to Rio Martin and Rincon, and from the hydro-electric station at Presa del Lau to Chechaouene (Xauen).

In addition to the main hydro-electric plant, there are supplementary power stations at Ceuta, Tetuan, Tangier, Larache, El Ksar el Kebir, and possibly at other points. These plants are necessary because the Oued Lau plant cannot operate at sufficient capacity during dry spells when the water is low. It is reported that during the summer and autumn of 1942

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¹British Military Intelligence, Report on Spanish Morocco Electricity Supply, February 14, 1942 (O.S.S.CID #19261S).

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electric service in Spanish Morocco had to be cut severely as a result of unusually dry weather and the scarcity of gas oil for the supplementary stations. Heavy rains in late October relieved this situation.

In eastern Spanish Morocco a line at 30,000 volts connects the Melilla power station with the sub-stations at Atalayan and Uixan in the iron ore mining area.

Current is stepped down to 3,000 volts at transformer stations in the towns served by the large network. Consumer current in Larache, Arcile, Tetuan, Tangier, Ceuta, and Melilla is 127/220 volts, AC, 3-phase, 50 cycles, although the given voltage may vary between 110 and 127 volts and between 200 and 220 volts.

The two most vital points in the electric power supply are the plants at the Presa del Lau and Melilla. The disruption of these would greatly reduce the electric supply for the whole country, although there are stand-by diesels in several of the towns. The sub-station at Tetuan is an important distributing point.

II. Principal Power Stations¹

The principal power stations are located at Presa del Lau and Melilla.

¹British Military Intelligence Report on Spanish Morocco Electricity Supply, Feb. 14, 1942 (OSS, CID, #19261 S); C.B. 4096 E. ISIS Report on North-West Africa, May 1942, pp. 16-18; M/A Tangier, September 30, 1941, November 17, 1941; M/A Tangier, June 17, 1942 U. S. Department of Commerce Attache, Madrid, June 2, 1937.

Presa Del Lau

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Location: On the Oued el Lau, at the junction of that river and the Talambot, about 8 miles north of Xauen.

Capacity: 7,100 KW. (Plans have been made for future doubling of the power of the station.)

Output: 14 million KWH (in 1938).

Head and Flow of Water: The total flow of the river varies between 273,000 and 378,000 gals. per second. The flow of water to the power house is 250 gals. per second. The head of water used is 394 feet.

Water Diversion: A rubble dam 66 feet high and 984 feet long forms the Ali Telat reservoir some 7 miles (one report gives only 4 miles) upstream from the dam. The capacity of the reservoir is 164 million gals. and can be increased 225 million gals. The concrete water aqueduct leading from the dam follows the stream for 5 miles on the west side, crosses it by means of an inverted steel siphon, and enters a surge tank, whence pressure pipe lines (penstocks) convey the water to the power station

Generating Plant: There are two Escher-Wyss/Oerlikon vertical type turbo-alternators, each of 3,550 KW (4,350 KVA), running at 750 R.P.M.

Current Generated: 6,000 volts, A.C., 3-phase, 50 cycles.

Transmission and Distribution: For each alternator there is a 6,000/66,000 volt transformer, capacity 4,350 KVA. A line at 66,000 volts runs to Tetuan,

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31 miles north, and from there power is distributed to Ceuta, Llano, Tangier, and Larache. Some of this supply is stepped down from 66,000 volts to 15,000 volts, and a line at this tension runs to Xauen. There are also some 2,000 volt local distribution lines.

There is a sub-station adjoining the power plant, one at Tetuan, and one on the Tangier side of the Tangier-Tetuan pass.

Remarks: This plant began operation in 1934 and is the most important power station in Spanish Morocco. Its strategic importance is indicated by the fact that the whole area around the dam is forbidden. It is consequently difficult to obtain recent accurate information.

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Location: At Melilla port, at the shore end of the Mineral pier. On the seaward side of power house is a small building containing the circulating pumps.

Owner: Cia. Espanola de Minas del Rif (This is not absolutely certain, as there are two companies in Melilla which produce electric power. It has been suggested that this plant belongs to the Cia. Hispano-Marroqui de Gas y Electricidad, and that the Minas del Rif has a diesel stand-by station at the mines. Since the power plants in Melilla are now under military control, accurate information is difficult to obtain).

Capacity: 5,000 KW.

Output: No information.

Generating Plant: It is a steam powered and is divided into two complete and equal halves. There are two Sulzer type boilers, each with a heating surface of 4,100 sq. ft., and each generating 13 tons of steam per hour at a pressure of 284 lbs./ sq. in. and a temperature of 750°F. Distilled sea-water is used as boiler make-up, and sea-water for condensing. Welsh coal is the standard fuel in normal times, but oil can be burned.

There are two Oerlikon/Brown-Boveri type turbo-alternators, each with 2,500 KW (3,125 KVA) normal rating and 3,900 KVA maximum continuous

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overload. These operate at 3,000 R.P.M.

Current Generated: 6,000 volts, A.C. 3-phase, 50 cycles.

Transmission and Distribution: Each alternator is direct

coupled to a transformer stepping the whole of the supply up to 32,000 volts. One line at 30,000 volts runs to the Atalazon and Uizen sub-stations at the iron mines 17 miles away. From the power plant to the boundary of Melilla the cables are underground, beyond that there are overhead transmission lines. Underground cables at the same voltage (total length 2 miles) feed the town of Melilla. (Another report says that transmission to the mines is at 6,000 volts.) The station is also reported to serve the town of Nador.

There are also two 32,000/500 volt transformers, 500 KVA each. Current at 500 volts is used for auxiliaries in the power station, for a connection with the old diesel plant in Melilla (although this is not certain), and for supplying the ore-handling plant at the harbor. This ore-handling plant can take care of 2,500 tons of ore per-hour when consuming 500 KW.

Remarks: This plant, the only large one in eastern Spanish Morocco, was put into operation in 1931.

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III. Town Electric Installations¹

The following points in Spanish Morocco have either active electric power stations, stand-by stations, or important sub-stations. Information is also given, when available, on the distribution of electricity and local current characteristics. The towns are presented alphabetically:

1. Alhucemas
2. Ceuta
3. El Ksar el Kebir (Alcazarquivir)
4. Larache
5. Melilla
6. Nador
7. Tangier
8. Tetuan
9. Uixen

1. Alhucemas (Villa Sanjuro)

Producer or Distributor: Cia. de Minas del Rif.

Prime Movers: Two Diesel engines, capacity 400 H.P. each

(Another report gives total capacity as about 500 KW).

They are situated on the north-west edge of the town.

Current Generated: 220 volts, A.C.

Remarks: It is reported to give a large reserve of power.

2. Ceuta

Prime Movers: Power is supplied from the hydro-electric

station at Presa del Lau. The old generating station

with steam and Diesel engines (capacity stated to be

¹British Military Intelligence, Report on Spanish Morocco Electricity Supply, February 14, 1942 (OSS, CID, #19261S); C.B. 4096 E, ISIS Report on North-West Africa, May 1942, pp. 16-18; M/A Tangier, Sept. 30, 1941, Nov. 17, 1941; N/A Tangier, June 17, 1942 U. S. Dept. of Commerce Attaché, Madrid, June 2, 1937.

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2. Ceuta(cont.)

Prime Movers (cont.):

250 KW in 1930; another report gives 1,500 KW) is still available as a stand-by. It is situated on the hill to the west of town.

Transmission and Distribution: Current is transmitted from Tetuan by overhead lines at 66,000 volts, stepped down to 3,000 volts for local distribution. The substation, situated near the sea on the Tetuan road, has one 1,000 KVA transformer with a similar one in reserve. (Another report states that this is a 66,000/15,000 volt transformer). The 3,000 volt current is stepped-down by substations in town to 110/220 volts, A.C., 3-phase. It is reported that the current produced at Ceuta is one phase 110/150 volts.

3. El Ksar el Kebir (Alcazarquivir)

Power is supplied by a 15,000 volt line from Larache. Consumer current is AC 3-phase 50 cycles, probably 127/220 volts. There is a small stand-by diesel station west of Avenida de Sidi Ali Bugaleb. Its capacity was reported to be 150 KW in 1930 (another report states that the capacity may be 1,000 KW).

4. Larache

Prime Movers: Power is supplied from the hydro-electric station at Presa del Lau. There is a stand-by diesel generator (capacity reported to be about 1,000 KW, generating 530 volts) 400 yards south-west of the Port railway station, but it is said to be obsolete and worn out.

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4. Larache(cont.)

Transmission and Distribution: The 66,000 volt current comes from Presa del Lau via Tetuan and Llano by overhead cables on steel lattice pylons about 30 ft. high. The sub-station, situated at the site of the old power station, has a 66,000/15,000 volt transformer, capacity 1,000 KVA, for supplying the lines to Arcila and El Ksar el Kebir (Alcazarquivir). Current for Larache is stepped down to 3,000 volts and distributed to transformers in town where it is stepped down to 110/220 volts A.C., 3-phase, 50 cycles. The principal sub-station also has a 15,000/550 volt transformer 550 KVA capacity, which is presumably connected with the old stand-by station.

5. Melilla

(See material on Melilla plant of Cia, de Minas del Rif, above). In addition to the main power plant there is also reported to be a plant owned by the Cia. Hispano-Marroqui de Gas y Electricidad, situated some 3950 feet to the south of the other station. It is believed that this station has two Mawn diesel generators of 300 H.P. each, generating 500 volts, at 180 a.p.m. The relation of this plant to the main station is not clear and reports are contradictory. It is possible that the diesel plant is only a stand-by. Consumer current in Melilla is 110/220 volts, A.C., 3-phase, 50 cycles.

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6. Nador

Prime Movers: Diesel generator, capacity 20 H.P. The

Foreign Legion barracks at Taouima is reported to have a 400 H.P. diesel generator.

Transmission and Distribution: The town generator provides light. The purpose of the larger set is not known, but it may supply power for the W/T stations.

7. Tangier

Prime Movers: Tangier is supplied by the hydro-electric plant at Presa del Lau, but there is also a stand-by diesel set which is kept in good condition and which is reported to have produced one million units in 1939. The equipment includes two 3-cylinder Schneider diesel motors of 180 H.P., three 4-cylinder Sulzer diesels of 162, 200, and 300 H.P., and one 6-cylinder Sulzer diesel of 1,000 H.P.. The plant is situated about 2½ miles SE of the town and about one mile E of Duar Charf. There is also reported to be a small station situated on or near the Cuesta de la Playa, 150 yards SW of the railroad station. In 1936 it was reported to be generating D.C., but no later information about this plant is available.

Transmission and Distribution: The main line at 66,000 volts comes from Tetuan by three cables. At the transformer station, situated by the old power station, the current is stepped down to 3,000 volts. Transformers in the town step down the current to 110/220

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7. Tangier(cont.)

Transmission and Distribution:(cont.)

volts, A.C., 3-phase, 50 cycles, for local supplies.

The pumping stations in connection with the town water supply operate at 3,000 volts.

8. Tetuan

Prime Movers: Electric power is supplied from Presa del Lau. There is also reported to be a thermal plant two miles out of town on the Rio Martin road. It is said to have had a capacity of about 500 KW, but its machinery is now obsolete and worn out.

Transmission and Distribution: Current is transmitted from Presa del Lau along the Tetuan-Alhucenas road by overhead cable supported by large lattice pylons 40 feet high. The Tetuan sub-station is situated 1½ miles W of town on the north side of the main road. Current is stepped down from 66,000 volts to 15,000 volts for transmission to Rio Martin and Rincon and down to 3,000 volts for transmission to substations in the town. Local current is distributed at 110/220 volts, A.C., 3-phase, 50 cycles. There may be a 550 volt connection with the old stand-by station.

9. Uizen

This is one of the two sub-stations at the iron ore mines in eastern Spanish Morocco, fed by a 30,000 volt line from Melilla. There is a transformer of 4,000 KVA which steps this current down to 3,000 volts for use in the mine

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TELECOMMUNICATIONS
OF
SPANISH MOROCCO AND TANGIER

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RADIO STATIONS

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A. Summary

The information on Spanish Morocco radio facilities to be found in the official sources is extremely fragmentary, owing in part to the recent additions to the system. There appear to be the following W/T facilities:

<u>Army</u>	<u>Navy</u>	<u>Air Force</u>	<u>C.T.N.E.</u>
Arcila	Ceuta	Herraiz	Melilla
Ceuta	Melilla	Larache	
Larache	Tetuan	Melilla-Nador	
Melilla		Tetuan	
Nador			
Tetuan			
Villa Alhucemas			
Dar Drius			
Tarquist			
El Ksar el Kebir			
Penon de Velez de la Gomera			

Tangier has W/T stations operated by the Spanish, Italian and German legations, and the British firm, Eastern Telegraph Co., Ltd. Whether the airport station formerly operated by Compagnie Air-France and the Cherifien government postal station are still in French hands is not clear.

The official sources report no broadcasting stations in the Spanish zone, but recent reports mention broadcasting facilities at Ceuta, Melilla, and Tetuan; also a new station at Tangier. All broadcasting facilities are presumably government-owned.¹

No amateurs reported since prohibited at the outbreak of Spanish Civil War in 1936.²

¹U. S. Department of Commerce, World Radio Markets: Spanish Morocco, July 5, 1938.

²Ibid.

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B. Stations¹

Abbreviations Used:

Type of service	FX - communicates with fixed (land) points.
	FA - " " aircraft.
	FC " " ships
	D/F- Direction-finder (maritime or aeronautical).
	BC - broadcasting.
	Meteo - Meteorological bulletins.
	Notices - Urgent notices to navigators.
User	CO - for official use only.
	CR - " limited public use.
	CP - " public use.
	CV - for use of private firm only
Type of emission	A1 - telegraphy on a pure continuous wave, keyed.
	A2 - modulated telegraphy; carrier wave modulated at one or more frequencies. Keyed.
	A3 - telephony; voice is heard.
	B - damped. Waves composed of successive series of oscillations, the amplitude of which, after attaining a maximum, decreases gradually. Keyed.

¹Location and equipment information throughout this report comes from one or more of the following: ISIS, Tangier, Spanish and French Morocco, Nov., 1940 and ISIS, Report on North-West Africa, May 1942; MID. Survey of Northwest Africa, Aug. 20, 1941; A-2, Air Route Guide: Africa, April 1942; A-2, Airport Directory: North Africa, July 7, 1942, coordinates and other data come in general from the International Telecommunications Union (Berne, Switzerland) lists: Liste des Fréquences, Feb., 1942; List of Coast Stations and Ship Stations, May 1941; List of Aeronautical Stations and Aircraft Stations, April 1941; List of Stations Performing Special Services, Nov. 1940 (and supplement); List of Broadcasting Stations, Nov. 1940 (and supplement).

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Type of emission(cont.) AB - A1, A2, A3, and B types all used(?)

E.T.C. - Eastern Telegraph Co., Ltd.

C.T.F.E. - Compania Telefonica Nacional de Espana.

A.O.F. - French West Africa

Short-wave -- over 2000 kc.

Medium-wave -- 300-2000 kc.

Long-wave -- 1-300 kc.

kw. = kilowatts

w. = watts

Form normally used:

<u>Name and Call Sign</u>	<u>Coordinates</u>	<u>Operating Agency</u>
<u>Frequencies(kc.)</u>	<u>Type of Emission</u>	<u>Power in Aerial(kw.)</u>
		<u>Functions Performed</u>

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CEUTA

Ceuta is reported to have (1) a military radio station about one-third mile south of the railroad station; this is probably EGD, listed below. (2) There is also a naval station on España Mole. Very low power; may be receiving station only. (3) The station in "Ancien Ceuta" is stated to be a receiving station only. (4) No details available on "Radio Ceuta," the broadcasting station, which was privately owned until 1936, when the military authorities took it over.

EGD		5 20 36 W		Army
		35 53 24 N		
125	---		---	FC
181.8	---		---	"
214.3	---		---	"
250	---		---	"
375	---		---	"
333	A B		FA	(FX CO)
500	A B		FX CO	

The naval station (probably using EGD's transmitters carries on communication with other Spanish naval stations, using 4150 kc. at night and 6400 kc. during the day, with a secret type, three-letter call sign, which is changed about once a month.

Radio Ceuta, using call sign EAJ-, transmits on a frequency near 1500 kc., with a power of 150-200 watts. Broadcasts daily programs.

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HERRATZ

South of Villa Alhucemas. Station located at airport on left bank of River Nekor about 2 miles south of beach.

ECI

3 56 16 W (No information Air Force
35 03 20 N on location)

500 kc. ---

FX

Transmits

333.3 kc. A2 A3
500 " "
667 " "

500 w.

FA CO

" " (FX?)

" "

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LARACHE

1. An Air Force station, ECB, is located at the Aumara airfield 10 miles SSE of Larache and 8 miles from the coast. Its lattice masts are NE of the field, 65 ft. high.

ECB

6 04 44 W
 35 03 37 N

Air Force

Transmits and Receives

250	A2 A3(B) 3 kw.	FA CO (FX?)
333.3	" " "	" "
500	" " (B) "	" " (FX?)

The same station seems to be used by the Air Force for point-to-point communication with other Air Force Stations; call sign ECS, frequencies 316, 322, 333, 5500, and 6000 kc. For calling non-military aircraft, call sign EDS is used.

2. A military coastal station EGF, with one 30 ft. mast, is clearly visible on the hill near the artillery depot.

EGF

6 08 36 W
 35 10 42 N

Army

125 kc.	---	---	FC CO
181.8	---	---	" "
214.3	---	---	" "
240	A1	---	" ", meteo
250	---	---	" "
375	---	---	" "
500	AB	---	FX CO

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MELILLA-NADOR

In the vicinity of Melilla, two military stations are reported.

a) One (probably EGB, listed below) is $\frac{1}{2}$ mile W of Fort Carmellos, with one lattice mast about 90 ft. high and six pole masts about 40 ft. high. Has its own generator plant, driven by a German diesel engine.

b) The other is in the outlying barracks 2 miles NW of town, with 2 lattice masts about 80 ft. high. No further information on this station.

There is also a Compania Telefonica Nacional de España (C.T.N.E.) short-wave station, listed below.

The Army, Navy and Air Force each have smaller headquarters sets in town.

Radio-Melilla, the ex-amateur broadcasting station now owned by the Falange, is described as having a power of 600 watts, on 42 metre band (6977-7143 kc., probably 7090 kc.) (One source says 41 metre band--7143-7317 kc.--power not above 50 watts).

1. Station EGB is listed by the Berne Union as communicating with fixed points, but recent intelligence reports call it a coast station.¹

Probable location:

EGB		2 57 07 W		Army
		35 17 11 N		
125 kc.	---		---	FC
166.7	Al		---	Meteo
181.8	---		---	FC

¹C.B. 4096E, ISIS, Report on North-west Africa, May 1942, III, 182-3.

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1. (cont.)

214.3	---	---	FC
250	---	---	FC
272.7	A B	---	FX CO meteo
333	A B	---	FX CO (FA?)
375	---	---	FC

2. No information at hand on the location of the C.T.N.E. station, nor is its call sign given.

---	No co-ordinates given	C.T.N.E.
5345 kc	A3 300 w.	FX
5750	" "	"
6970	" "	"

3. The principal station in the Nador area is the aeronautical station which serves the Melilla-Nador Tauima Airport, 10 miles S by E of Melilla, 2 miles S of Nador, immediately E of the Melilla-Zelouana road and railroad.

ECG	2 55 39 W	Air Force
	35 09 35 N	

Transmits and Receives

214.3 kc	A2 A3	2 kw	FA CO
333.3	" "	"	" "
500	" "	"	" "

This station (ECG, above) is also used by the Spanish Air Force for point-to-point communication with other Air Force Stations. Call sign ECR and 333 kc is used for point-to-point communication by the Airport; ECR-2 and 5500 kc. used when the Air Headquarters of the Eastern Zone is calling. In addition, communication with non-military aircraft is carried on with 333 kc., using call sign EDR.

A large military set and several small ones are reported in the vicinity of Nador.

The seaplane base ($2^{\circ}54' W 35^{\circ}13' N$) south of the Atalayan peninsula has its own Air Force station,

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which communicates with other Air Force stations, using 5500 kc. and the call sign ECR-1.

The Cabo Tres Forcas Radio Beacon is on the cape N of Melilla, at $2^{\circ}58'43''\text{W}$, $35^{\circ}26'45''\text{N}$. It works on 300 kc., A2, using the call sign TF; its normal range is 30 nautical miles. It is primarily a fog signal station.

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TETUAN

1. A military coastal station is reported located about $\frac{1}{2}$ mile out of Tetuan just south of the road to Rio Martin has one lattice mast about 100 ft. high.

EGK		5 20 45 W		Army
		35 34 26 N		
125 kc.	---		---	FC CO
181.8	---		---	" "
375	---		---	" "
240	A1		---	Meteo

The same transmitters seem to be used by the Naval Station, which is reported to use a secret type, three-letter call sign, changed at about monthly intervals. The station uses 4150 kc. at night, 6400 kc. in the day time. It communicates with other Spanish naval stations and warships.

2. Station ECH is at the NE corner of the airport $2\frac{1}{2}$ miles NE of town between the roads to Rio Martin and to Ceuta; has 2 pole masts about 30 ft. high.

ECH		5 19 57 W		Air Force
		35 35 23 N		

Transmits and Receives:

214.3 kc.	A2 A3	500 w.	FA CO
333.3	"	"	" "
500	"	"	" "

The same station is used by the Air Force for communicating with other Air Force stations, with the call sign ECQ, 316, 322, 333, and 5500 kc. Call sign EDQ is used for communicating with non-military aircraft.

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3. The "Radio Tetuan" broadcasting station is located in Rio Martin (NE of Tetuan on the coast), and has four pole masts about 30 ft. high. It is reported to broadcast short-wave programs to South America. No further information. Reported generating on the 41 metre band (7143-7317 kc.), with power of about 100 watts; barely strong enough to reach South America.

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3. The "Radio Tetuan" broadcasting station is located in Rio Martin (NE of Tetuan on the coast), and has four pole masts about 30 ft. high. It is reported to broadcast short-wave programs to South America. No further information. Reported generating on the 41 metre band (7143-7317 kc.), with power of about 100 watts; barely strong enough to reach South America.

VILLA ALHUCEMAS (VILLA SANJURJO)

Military station on Morro Viejo, with very conspicuous masts.

EGX

3 55 28 W
35 14 25 N

Army

Point-to-point, aeronautical:

EGX	333 kc.	A B	---	FA	FX	CO
	500	"	---		FX	CO

Communication with ships:

EGX	300 kc.	---	---	FC	CP
	375	---	---	"	"
	500	---	---	"	"

Small station on Penon de Alhucemas island.

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TANGIER

1. EGT

No co-ordinates or
location given

Spanish
station

4000 kc ----
5455 ----

100 w.
"

FX CO
" "

The Spanish Legation station is reported to have one 40-ft. mast; this may be station EGT.

2. The Italian Consulate station is reported to have two 50 ft. masts, located on the north edge of town visible from the sea. Call sign IQC, name "Diplotalia Tangeri"; communicates at regular hours with station IDR ("Digepol Roma") in Italy, which works on 5150 kc. at night, on 7850 kc. during the day.

IQC

5 48 40 W
35 47 10 N

Italian Consul-
ate

4288 kc. Al A2

500 w.

FX CP

5662.5 kc.
(night)

10420 kc.
(day)

FX CO Rome

3. The French-controlled Moroccan Government formerly operated a point-to-point short-wave and a coastal short-wave station (the former operated by the Post Office) using call signs CNW - 2 and CNW respectively. The transmitter seems to be in town; the antennae are located as described below. Present operating agency not known.

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a. The postal station seems to be about 90 ft. lattice masts W of town.

CNW-2	5 48 10 W	Moroccan
	35 45 57 N	Government (?)
5884 kc.	A2 A3	2 kw. FX internal

b. The coastal station, which is also reported to have maritime D/F facilities (no details), is close to the Cape Spartel lighthouse.

CNW	5 49 10 W	Moroccan
	35 47 57.5 N	Government (?)
405 kc.	A2	2 kw. FC CP Notices
500		
143 kc.	A1	" " "
168		

4. The aeronautical station CNC is just north of the Souahel (Boukhalf) Airport, 5 miles SW of Tangier, on the road to Larache; 4 miles SSE of Cape Spartel. Has 2 masts about 50 ft. high near the hangars, and its own gasoline-driven generator set. Formerly operated by Compagnie Air-France.

CNC	5 54 27 W	Cie Air-France
	35 43 32 N	(?)

Transmits

260 kc.	A1 A2	---	FA CV, in peace-
329	"	---	time worked French
5263	"	---	Spanish, Moroccan
8108	"	---	and AOF stations
11235	"	---	in connection with
			France-AOF-South
			American air ser-
			vices.

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Other stations in Tangier:

5. The old "Radio Tangier" has been shut down, but a new Falange broadcasting station, with two 50-ft. masts, is reported. One report places it at Cape Spartel, with ^{watts.} 200/

6. A British Eastern Telegraph Co., Ltd. station, with D/F and telegraphic equipment, reported easily convertible to broadcasting use.

In addition to those already noted there are reported to be several secret sets in the legations, notably one in the newly reoccupied German legation. (This may also be the German Armistice Commission station; there is one in Tangier.¹ The British legation apparently did not have one up to September 1940. Various other "secret" sets referred to.

The Cape Spartel Navigational Radio Beacon and Fog Signal Station (5°55'30" W. 35°47'10" N), with a circular beacon, uses the call sign SP, transmits on 294.5 kc. A2, modulating to 846 kc. Its range is 200 nautical miles.

¹ M.A. Tangier, Report No. 392, April 14, 1942.

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Other Military stations:¹

Large military W/T stations noted at Dar Drius, Tarquist, El Ksar el Kebir, and Penon Velez de la Gomera. Smaller stations at each military post, airport, and Army, Navy or Air Force headquarters. These include sets at Arcila and Nador; no further details.

¹ MID, Survey of Northwest Africa, August 20, 1941, I, 50.

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TELEPHONE, TELEGRAPH, AND CABLE

A number of cables link Tangier and Spanish Morocco with each other, with Spain, and with Algeria. A company owned by the Spanish government, but privately operated, provides telephone and telegraph service along the main routes only. Much of the network in Spanish Morocco is operated by the military and, except for public phones on some highways for emergencies, is limited to military use. Standards of maintenance are reported to be poor.

It is reported that there are long distance radio telephone facilities available under the management of International Telephone and Telegraph.

Telephone and TelegraphLinesA. Civil Lines

Tangier to El Ksar el Kebir and Arbaoua.

Ceuta to Tétuán and Couesta Colorado.

Torres de Alcalá to Targuist.

El Ksar el Kebir to Xauen.

The vicinity of Melilla.

B. Military Lines

Larache to Sella and to Sidi Ali.

Xauen to Ben Karrich and northwest (not shown on map) to El Jemis.

Targuist to Xauen and to Puerto Capaz.

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¹Principal sources: ISIS, Northwest Africa, May, 1942; Nomenclature des cables formant le reseau sous-marin du globe, Berne, January 1939.

Villa Alhucemas to Dar el Hamra and to Targuist.

Villa Alhucemas to Nador and Nador to Hasi Ouenza.

A spur from Ceuta southwest to Zoco el Tzelatza (not on map).

There is no underground cable in Spanish Morocco.

A line from Tangier to Tetuan to Ceuta is reported under construction.¹ The land cable reported by the same source from Ceuta to Penon Velez de la Gomera to Villa Alhucemas to Melilla and cited in recent O.S.S. reports is apparently non-existent.

Equipment

A. Number of wires on main routes

El Ksar el Kebir - Arbaoua	10
El Ksar el Kebir - Couesta Colorada	8
Couesta Colorada - Tetuan	4
Tetuan - El Kincon	6
Tetuan - Rio Martin	4
Torres de Alcala - Targuist	2 or 3

B. Poles: most of wood. Arms on some routes are wood, on others are "lily of the valley" type. Some routes have glass insulators.

C. Telephone Exchanges and Instruments.

Tangier and Tetuan have automatic exchanges of Ericsson make, all others are magneto.

The Tangier exchange installed by the Ericsson

¹Military Attaché, interview with E.T.C. Manager in Tangier, May 27, 1942: O.S.S. Accession 17528-C.

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Company of Stockholm in 1935 consisted of three 500-line selectors (see illustration following this page), with each 500 line group having place for 10 registers, 40 cord circuits with line selectors and group selectors, together with 40 final selectors. The exchange could provide for 5,000 lines. Ten junction lines led from the manual switchboard to the automatic exchange for trunk calls. The manual switchboard had ten order lines from the automatic station and ten connecting lines to the French and Spanish trunk exchanges in Tangier, besides the ten junction lines. All lines connected to the switchboard terminated in jacks. Operation was by cords. Two 24 V batteries were used alternately, each with a capacity of 360 Ah. One charging unit was driven by an electric AC motor linked to town mains, the reserve charging unit by a gasoline engine.¹

Telephones used in Spanish Morocco are C.B., automatic and magneto. Reserve stores are not available locally.

D. Telegraph Offices

Arcila	Puerto Capaz
Ceuta	Rio Martin
Couesta Colorada	Cabo del Agua
El Ksar el Kebir	Tangier
El Rincon	Targuist
Larache	Tétuán
Melilla	Torres de Alcala
Nador	Villa Alhucemas

¹Ericsson Review, No. 1, 1936, pp. 10-11. Photo from cover, No. 4, 1936 (illustration of Ericsson 500 line selector).

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A. <u>List of Cables</u>		<u>Submarine Cables</u>		<u>Length</u>	
<u>From</u>	<u>To</u>	<u>Date</u>	(Inter- national, Naut.Mi.) ¹	(Spanish Govt unless other wise indicated)	
(one cable unless otherwise indicated)					
Arcila	Cadiz (2)	1921	88.329		
		1929	80.045		
	Larache	1921	25.858		
	Tangier	1921	37.709		
Cabo de Agua	Islas Chafarinas	1920	2.808		
Ceuta	Algeciras, Spain(4)				
	2 - Government	1921	15.966		
		1921	16.430		
	2 - Spanish Nat.	1924	18.02		
	Telephone Co.	1929	19.68		
	Málaga, Spain	1891	87.790		
	Peñón de Velez de				
	la Gomera	1894	82.844		
	Rio Martin	1928	24.207		
	Tangier	1907	32.363		
	Villa Alhucemas				
Islas Chafarinas	Cabo de Agua	1920	2.808		
	Melilla	1891	28.396		
	Nemours, Algeria	1908	28.703		
Larache	Arcila	1921	25.858		
Melilla	Almeria, Spain	1891	114.464		
	Ilas Chafarinas	1891	28.396		
	Málaga, Spain	1921	127.721		
	Rio Martin	1926	149.111		
	Villa Alhucemas	1891	86.070		
Peñón de Velez de la Gomera	Ceuta	1894	82.844		
	Puerto Capaz	1926	18.922		
	Torres de Alcalá(2)	1926	2.163		
		1926	2.207		
Puerto Capaz	Villa Alhucemas	1891	40.109		
	Peñón de Velez de				
	la Gomera	1926	18.922		
Rio Martin	Uad Lau	1928	26.807		
	Ceuta	1928	24.207		
Rio Martin	Melilla	1926	149.111		
	Uad Lau	1928	17.697		

¹One international nautical mile equals 1,852 km.; one U. S. nautical mile equals 1.853 km.

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<u>From</u>	<u>To</u> (one cable unless otherwise indicated)	<u>Date</u>	<u>Length</u> (Inter- national Naut.Mi.)	<u>Remarks</u> (Spanish Govt. unless other- wise indicated)
Tangier	Arcila	1921	37.709	
	Algeciras, Spain		reported abandoned	
	Cádiz, Spain (2)			1 French
	Ceuta	1907	32.363	
	Gibraltar	1887	35.870	Brit. Cables and Wireless. French Govt.
	Oran, Algeria			
Uad Lau	Puerto Capaz	1928	26.807	
	Rio Martin	1928	17.697	
	Alhucemas (3)	1925	3.380	
	"	"	3.746	
	"	"	3.390	
Villa Alhucemas	Algeciras, Spain			
	Ceuta			
	Malaga, Spain	1925	103.905	
	Melilla	1891	86.070	
	Penon de Velez de Gomera	1891	40.109	

B. Landing Huts and Stations

Arcila. Cable house 35° 28' 42" N., 6° 01' 36" W., on northern side of mouth of Oued (Wadi) el Helu.

Ceuta. Cable house 35° 53' 31" N., 5° 18' 00" W., close northeast of root of Dique de Levante. Three cables run into bay Ensenada de la Almadraba 1-3/4 miles WSW.

Ilas Chafarinas. Cable house 35° 10' 58" N., 2° 25' 25" W., on eastern side of Isabel II Island, the easternmost of three tiny islands about 2 miles N. of Cabo del Agua.

Larache. Cable house 35° 11' 40" N., 6° 09' 39" W., about 720 yards east-northeast of Punta Nador light-house.

Melilla. Cable house 35° 17' 42" N., 2° 57' 03" W., on northern side of isthmus about 240 yards west of lighthouse.

Peñón de Velez de la Gomera. Cables landed about 2½ miles southwest of Peñón de Velez, in Ensenada de Alcala (on the shore is the village of Torres de Alcala), and at Peñón de Velez.

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Rio Martin. Cable house 35° 37' 06" N., 5° 16' 18" W., about 800 yards north of the mouth of Oued Martine.

Tangier. Cable houses in vicinity of ruins of old Tangier, about 2 miles east of Tangier.

Spanish cable house 35° 46' 40" N., 5° 46' 05" W. (Two cables and portion of an abandoned cable.)

British cable house 35° 46' 48" N., 5° 45' 51" W., at former Villa Harris. (One cable and an abandoned cable in vicinity.)

French cable house 35° 46' 22" N., 5° 47' 00" W. (One cable, and an abandoned cable.)

Uad Lau. Cable landed near mouth of Uad Lau.

Villa Alhucemas. Cables land in Cala del Quemado. Two to three connect Villa Alhucemas with Penon de Alhucemas.

C. Equipment

French-African cables use Baudot and Picard installations.¹ The single core, carrier telephony cables from Teneriffe to Grand Canaria and from Algeciras to Ceuta, installed in 1930 and 1931, for the Spanish National Telephone Company, were designed for six carrier channels, the maximum frequency being 30 kc/s.²

D. Condition.

Cables in the Straits of Gibraltar chafe on the

¹Ministere des Postes, Télégraphes et Téléphones, 1) Bulletin d'Informations, de Documentation et de Statistique, October 1937, p. 11, 2) Cour de surnuméraires, vol. 4, "Appareils et installations télégraphiques et téléphoniques", Paris, 1936, p. 169.

²E. M. Deloraine, General Aspects of Telephone and Telegraph Communications in Europe, Feb. 1939, p. 17.

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bottom and need frequent repairs.

A recent informant¹ made these observations concerning the submarine cables:

(1) He believes that the Ceuta-Malaga cable is not functioning but does not know why.

(2) He is sure that the Arzila cable has not been in use since the Spanish Civil War (1939).

(3) He is certain that the Melilla-Malaga cable is not working, and equally certain that the Melilla-Almeria cable is in use.

The same source states that Eastern Telegraph Company, Ltd. (British--all British employees), Western Union and Commercial Cable Company (the latter two American), all send cables out of Tangier. All three companies send cables across to Gibraltar; thence to their European or American destination.

¹Military Attaché, Tangier, interview with E.T.C. manager in Tangier, May 27, 1942: O.S.S. accession 17528-C.

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AIRFIELDS OF SPANISH MOROCCO AND TANGIER ZONE

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AIRFIELDS OF SPANISH MOROCCO AND TANGIER ZONE

¹
1. Primary airfields

a. General

There are only four known developed airdromes in in Spanish Morocco and the Tangier zone: Larache/Aumara, Melilla/Tauima, Tetuan/Rio Martin, and Tangier/Souahel and Bou Ghalf.

According to available information only the fields at Larache/Aumara and Melilla/Tauima provide runs of 3,300' or more. There are known to be surfaced runways only at the Tangier field and perhaps at the Larache field. Surfaces at all these fields are probably all weather, although the area off the runways at Tangier is reportedly soft in wet weather and the field at Tetuan is reported marshy after heavy rains. All these fields are located near seaports and can be as readily serviced as any regions in the area. There are radio and telegraph facilities at all the fields and telephone facilities at all except Tetuan/Rio Martin. Underground fuel storage installations have been reported for Larache/Aumara, Tetuan/Rio Martin, and Melilla/Tauima. There are also reported to be underground deposits for the storage of aviation gasoline at Tarquist and the Melilla/Atalayon seaplane base. There is no bulk fuel storage at the Tangier field.

¹
For references see detailed description that follows.

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The weather over this area is generally favorable for flying. Visibility is usually good except for occasional morning fogs in early winter. Snowfall is rare in the coastal regions, the area in which the principal airfields are located. The practicability of these fields may be affected by heavy rains in December and February,¹ less so in January, but at any time only for brief periods.

¹ ISIS, Northwest Africa (May, 1942), pp. 44, 46-47.

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b. Detailed Description (Airfields)

Larache/Aumara

1. Coordinates: 35°04' N
6°05' W
2. Local Position: 10 miles SSE of Larache, 8 miles from coast.
3. Dimensions: Trapezoidal landing area 3450' long. NW end 950' wide, SE end 2100' wide. Small markers at approximately 200' intervals outline the boundaries of the field.³
4. Surface: Grass on sandy soil, all year.
5. Facilities: Circle, corner, and boundary markings; boundary lights revolving floodlights; 3 hangars, telephone, telegraph, radio weather station; repairs; water. Underground storage, capacity 92,460 gallons.¹
6. Accessibility: Immediately W of Larache-Alcazarquiver (El Ksar el Kbir) road and railroad.²

Source: Airport Directory of North Africa except where otherwise noted.

¹State Department despatch, Tangiers, 9 April 1942.

²ISIS, Morocco.

³Photo Intelligence Report, Larache, based on photographs of January 1942, OSS #20358.

Melilla/Tauima

1. Coordinates: 35°12' N¹
2°55' W¹
2. Local Position: On E side of main highway running S from Melilla, about 7 miles from Melilla and about 1.2 miles S of the village of Nador.²
3. Dimensions: Various reported as 3600' x 2700',¹ or 1969' x 2953' (600 meters 900 meters).²
4. Surface: Hard. No surfaced runways.²
5. Facilities: Hangars, machine shops, barracks, bomb proof dugouts, facilities for underground fuel storage, equipment for night flying.²
6. Accessibility: Railroad spur at field. Good road to Melilla.²
7. Remarks: One of the two largest and best equipped fields in Spanish Zone. SW of the city is terrain suitable for emergency landing grounds.²

¹Airport Directory of North Africa.

²M/A Tangier, 15 April 1942, OSS #15804.

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Tangier/Souahel and Bou Ghalf

1. Coordinates: 35°44' N
5°54' W
2. Local Position: 5 miles SW of town; 4 miles SE of
Cape Spartel. Located in a valley
with good approaches.¹
3. Dimensions: Two areas: Souahel (SW) E/W 2625' x 1500';
Bou Ghalf (NE) N/S 1980' x 1530'. Run-
ways: ENE/WSW 2700' x 132' and NE/SW
1800' x 132'.
4. Surface: Sandy, soft in wet weather. Runways are
ferro-concrete. Probably good drainage system²
5. Facilities: Hangars, repairs, telephone, telegraph,
radio, D/F; boundary and flood lights.
6. Accessibility: Road to town.

Source: Airport Directory of North Africa except where
otherwise indicated.

¹ Photo Intelligence Report, Tangier, based on photographs
of January 1942, OSS #20352.

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Tetuan/Rio Martin*

1. Coordinates: 35°36' N
5°20' W
2. Local Position: 2½ miles NE of the railway station at Tetuan,¹ between the Tetuan-Ceuta railroad and the Tetuan-Rio Martin road.²
3. Dimensions: One runway variously reported to be 2380,'¹ or 3000'.²
4. Surface: Level, marshy in wet weather.¹ Reported in excellent condition in January 1942.²
5. Facilities: Radio, telegraph, hangars. Night landing facilities reported under construction in January 1941.¹ Underground fuel storage facilities reported April 1942, capacity 132,080 gallons.³
6. Accessibility: Main railroad between Tetuan and Ceuta has a spur which serves the field.²
7. Remarks: Reported April 1942 that the Spanish authorities were studying plans for the construction of new airfield in the vicinity, since they considered the present field too small for bomber use and too vulnerable to attack from the sea.³ Reported most recently (August 1942) that the Italians have built an

*For footnotes see last page, this airfield.

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Tetuan/Rio Martin (cont.)

underground depot between Rio Martin and
Tetuan. Planes are said to be assembled here.

¹Airport Directory of North Africa.

²Photo Intelligence Report, Tetuan, based on photographs of
January 1942.

³State Department despatch, Tangier, 9 April 1942, OSS
#20352.

⁴"Confidential Source," Tangier, 17 August 1942, OSS
#20732.

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2. Secondary airfields and landing grounds

a. General

Most available information on secondary airfield and landing grounds in the area is either fragmentary or unconfirmed. Recently fields were reported at Tamarot; near Melusa; Jumaz; near the Melusa road; and Imzoren (Ein Zoren), said to be the best in the Alhucemas region.

The ISIS report of January 1941 listed 23 emergency fields. Three of these were in the Larache area, on near Arcila, two in the Alhucemas region, two in the Melilla section, and two more nearby in the vicinity of Nador. The existence of these fields was NOT confirmed at the time of the British report and has not been confirmed subsequently. The names and approximate locations of these fields are given in subsequent pages. They should probably be considered as possible sites for landing grounds rather than landing grounds in actual use. /Note however: It is probable that the former airdrome at Alhucemas/El Herraiz, 9 1/2 miles south of the town of Alhucemas on the plains between the Guis and Nekor river is still in use. It was described in the January, 1941 ISIS reports as having a landing area measuring 3270' N-S and 1620' E-W with a firm, grass-covered surface and refueling facilities.]¹

¹ISIS, Report on Tangier, Spanish and French Morocco (air section dated January 1941)

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b. Detailed description

1. Fields reported in 1942 include:

(a) An airbase with anti-aircraft defenses and an underground hangar at Tamarot in the Ketama district several miles to the south from a point on Bab Taza-Ketama road, 50.9 km. from Bab Taza.¹

(b) A field near Melusa, some 20 miles southeast of Tangier about 35° 42' N and 5° 45' W; runways were reported under construction in March 1942.²

(c) A reserve airfield, reported in September 1942 at Junaz near the Melusa road. This may be identical with the Melusa field above.³

(d) A field at Imzoren (Ein Zoren), about 8 miles southeast of Alhucemas (Villa Sanjurjo).⁴ This field is reported to be the best in the Alhucemas region.

(e) In September 1942 the Italians were reported to be assembling planes at an underground air depot between Rio Martin and Tetuan.⁵

No further information is available concerning these recent developments.

¹State Department despatch, Tangier, 23 July 1942, OSS#20268.

²Airport Directory of North Africa.

³Cables from Tangier (C.D. 4106 and C.D. 4116), 10 September 1942.

⁴State Department despatch, Tangier, 23 July 1942.

⁵"Confidential source", Tangier 17, 18 August, 7 September 1942, OSS#20732.

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2. Unconfirmed Landing Grounds¹

<u>Name</u>	<u>Position</u>	<u>Remarks</u>
Ajdir	35 11 N. 3 53 W.	Said to be E. of Ajdir, and 6 or 7 miles SE. of Alhucemas (Villa Sanjurjo). Perhaps the same as Alhucemas/El Herraiz.
Ain ech Chouk (see Larache/ Ain ech Chouk)		
Alcazaba de Quebdani	35 07 N. 3 20 W.	25 miles SW. of Melilla.
Alcazarquiver (El Ksar el Kbir)	35 00 N. 5 55 W.	20 miles SE. of Larache
Ankod (see El Misab)		
Bab Tasa	35 04 N. 5 12 W.	9 miles SSE. of Xauen (Chechaouene).
Beni Idris (see Khemis)		
Ben Tieb	35 02 N. 3 28 W.	34 miles SW. of Melilla.
Chechaouene (see Xauen)		
El Ksar el Kbir (see Alcazarquiver)		
El Misab	34 56 N. 4 59 W.	27½ miles SE. of Bab Tas
El Tleta dos Ktama	34 53 N. 4 37 W.	41 miles SE. of Xauen (Chechaouene).
El Thine dos Beniamret	34 49 N. 4 09 W.	33 miles SSW. of Alhucemas.
Fift (Sidi Boujma)	34 54 N. 5 14 W.	48 miles SSE. of Tetuan and 19 miles SSE. of Xauen (Chechaouene).

¹ISIS, Morocco, January 1941.

(Unconfirmed Landing Grounds, cont.)

<u>Name</u>	<u>Position</u>	<u>Remarks</u>
Ghaoulane D'Audour	34 47 N. 5 09 W.	28 miles SSW. of Xauen (Chechaouene) on the river Aoudour.
Khemis (Beni Idris)	35 07 N. 5 47 W.	Souk el Khemis is 9½ miles NW. of Teffer. 23 miles ESE. of Larache.
Larache/Ain ech Chouk	35 10 N. 6 08 W.	1-3/4 miles SE. of Larache, 1½ miles NW. of Ain ech Chouk.
Melilla	35 16 N. 2 56 W.	1-3/4 miles SSE. of Melilla.
Oued Lao	35 27 N. 5 06 W.	The Oued Lao runs into the sea 19 miles SE. of Tetuan.
Segangan	35 09 N. 3 00 W.	11½ miles SSW. of Melilla
Sidi Boujma (see Fift)		
Soko el Arbaa de Beni Hassan	35 21 N. 5 23 W.	11 miles S. of Tetuan.
Souk es Sebt/Beni Gorfet	35 37 N. 5 50 W.	13 miles S. by W. of Tangier
Tanut (see Targuist)		
Targuist/Tanut	34 57 N. 4 17 W.	Tanut is 2¼ miles NE. of Targuist, which is 30 miles SW. of Alhucemas (Villa Sanjurjo).
Torres de Alcalá	35 09 N. 4 19 W.	At the mouth of the Rio Frah. 23 miles WSW. of Alhucemas.
Toumiat Zaio	34 56 N. 2 44 W.	27½ miles SSE. of Melilla.
Xauen (Chechaouene)	35 10 N. 5 16 W.	28 miles SSE. of Tetuan
Zelouane	35 04 N. 2 58 W.	Reported to be about 2 miles SW. of Zelouane, which is 15 miles S. of Melilla.

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3. Seaplane stations and anchorages.

a. General

There are two seaplane stations in the area: one at Ceuta, the other at Melilla/Atalayon. Only one seaplane anchorage, that at Alhucemas (Vila Sanjurjo) is reported. There may be seaplane anchorages along the Atlantic coast but none have been reported.

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b. Detailed Descriptions (Seaplane Stations)

Ceuta

1. Coordinates: 35°33' N
5°19' W
2. Local Position: 1 mile NW of the town, at the W end of
Ceuta harbor.
3. Dimensions: N/S 1650'; E/W 5700.
4. Surface: Sheltered water except in E winds. Depth 50' -
60'.
5. Facilities: Small slipway, workshop, telephone, W/T.
One small apron, 2 moorings.¹
6. Accessibility: Railroad at dockside(?)
7. Remarks: Base may be being developed.

Source: ISIS, Morocco except where otherwise indicated.

¹Photo Intelligence Report, Tangier, based on photographs of
January 1942. OSS #20352.

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Spanish Zone (cont.)

Melilla/Atalayon

1. Coordinates: 35°12' N
2°54' W
2. Local Position: Near the N end of Mar Chica lagoon,
S by E of Melilla, about 1 mile NNE
of the village of Nador.²
3. Dimensions: Ample room.
4. Surface: Sheltered except in SE winds.
5. Facilities: Hangars, workshops, slipway, and buoys.
Refueling facilities, W/T, telephone.
Underground fuel tanks, capacity 66,040
gallons.¹
6. Accessibility: Road to Melilla.
7. Remarks: Used as base of a sea reconnaissance squadron
of Spanish air force in October 1941.²

Source: ISIS, Morocco except where otherwise indicated.

¹ State Department despatch, Tangier, 9 April 1942.

² M/A Tangier, 15 April 1942, OSS #15804.

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Seaplane anchorage

Position

Alhucemas (Villa Sanjurjo) 35°14'N
3°55'W

Sheltered
from prevailing
winds.

4. Areas capable of development.

a. General

There are some seven areas that might be developed for operational use: the Oued Martin plain, north and south of Rio Martin; the Oued N'Kor plain, east of Alhucemas (Villa Sanjurjo); the Guerraoua basin, southwest of Melilla; the Garob plain, southwest of Zeluane; a small plain at the south end of Har Chica; a large area south and east of Arcila; and a similarly extensive region southeast of Larache.

b. Detailed description¹

(a) Oued Martin plain, north and south of Rio Martin is a level stretch extending for about 7 miles along the coast. This plain is about 3 miles wide in the northern sections and 5 miles wide in the south. The central portion is marshy but the northern and eastern ends are well-drained.

¹ ISIS, Report on Northwest Africa, May 1942, pp. 39-40.

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(b) Oued N'Kor plain, a short distance east of Alhucemas (Villa Sanjurjo), extends for some 7 miles north and south and 3 miles east and west. The soil is sandy and well-drained and would provide a good firm surface. This area would be accessible by means of the Alhucemas (Villa Sanjurjo) - El Arbaa de Taouirt main road which runs by the western edge of the plain.

(c) Guerraoua basin is southwest of Afso, the latter a town some 35 miles south of Melilla. This plain is roughly circular and about 8 miles in diameter, with well-drained sandy soil.

(d) Gareb plain, lies southwest of Zeluane, on either side of the road from Zeluane to Tistutin. The portion best suited for development is between Monte Arruit and Tistutin and is level, barren, and waterless and measures some 9 miles east-west and 6 miles north-south. This area can be reached by road from Alhucemas (Villa Sanjurjo) and Melilla.

(e) A small plain at the south end of Mar Chica is about $1\frac{1}{2}$ miles wide and extends for about 5 miles east-west.

It is further indicated that a large area around Et Thine south and east of Arcila and a similarly extensive region west of El Ksar el Kbir and southeast of Larache¹ could be developed.

¹ ISIS, Report on Northwest Africa, vol. II (maps), map 2A.

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THE PORTS OF TANGIER AND SPANISH MOROCCO

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THE PORTS OF TANGIER AND SPANISH MOROCCO

Two cities, Tangier and Ceuta, rank as ports of primary importance for the area. Tangier, with an estimated daily capacity of 1200-1500 tons, possesses a sizeable harbor which will accommodate several large vessels and a number of smaller ones. It offers excellent access to the hinterland over a standard-gauge railroad and good highways. Its principal deficiency lies in its lack of transshipment facilities. This bottleneck could probably be quickly overcome by the importation of a number of new lighters and several heavy automobile cranes.

Ceuta, estimated daily capacity 2,000 tons, possesses an excellent harbor which has accommodated ships of 33,000 tons. It offers ample transshipment facilities, although the number of cranes could well be augmented by automobile cranes. Its rail facilities are poor (the meter-gauge line goes only as far as Tetuan). Good highways lead to the interior, but must cross the Rif mountains in order to reach the hinterland.

Melilla, with an estimated daily capacity of 1,600 tons, has a good harbor that has been primarily developed to handle the great exports of iron ore. It is better equipped with transshipment facilities than the two foregoing ports. A meter-gauge railroad and several highways lead south and westward into the Rif interior.

The port of Villa Albucemas (Villa Sanjurjo) was completed in 1931 to tap the central Rifian region between Ceuta and Melilla. It has a small deep-water harbor which can probably accommodate 4 or 5 small ships (up to 4000 tons). It

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has no cranes, but vessels can unload with their own equipment directly onto the breakwater. The usefulness of this port will depend in large measure upon the volume of goods which can be moved over the roads into the interior.

Larache has a harbor of very limited area and depth, although it is strategically located on the railroad and highways south of Tangier.

Rio Martin has virtually no installations and is very shallow.

Arcila harbor is silted up and used only as a fishing port; like Larache, it lies along the railroad and highways south of Tangier and might be used as a landing beach against Tangier or Ceuta.

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TANGIER

1. Harbor

- a. Type: artificial bay created by projecting mole
 3,337 feet² long; very small inner harbor.¹
- b. Area: approximately 100 acres, mostly sheltered
 and over 26 feet deep.¹

2. Average Tides: 5 feet.^{1a}

3. Entrance: To inner harbor about 175 feet wide²

4. Anchorage: Outside of harbor: not generally used because
 of swell.

Inside of harbor: excellent

- a. depths: small inner harbor, 6-12 feet;
 harbor, 12-over 20 feet¹

- b. no. of ships: 1
 4 anchor berths 600 ft. radius 30 ft. min. depth³
 5 " " 450 ft. " 21 " " "

5. Wharfage

<u>Identification:</u>	<u>Length</u>	<u>Depth</u>	<u>No. of ships</u>
Breakwater mole: seaward and land- ward end	2,295 feet ² max. 30 feet ¹ min. 10 feet; ¹ 7 feet low water ⁴		At least, 1 berth for large liners; ¹ 600ft 2 small tankers berths, 200 ft.
Lighter quay	Approx. 830 ft.	6 ft.	lighters only ^{1a}

6. Capacity of port

- a. Annual average: 2
- | <u>Imports</u> | <u>Exports</u> |
|----------------|----------------|
| 35,000 T | 6,000 T |
- b. Estimated daily: 1,200-1,500
 (using 3 ships)¹
- c. Facilities for night work: breakwater elec-
 trically lighted.¹

¹Annotated, I.S.I.S., Morocco, 1940, pp. 180-86.

^{1a}Tangier Report, November 4, 1942.

²Revue de géographie marocaine, April, 1934, pp. 82. ff.

³ISIS Morocco, Pt. V. Oct. 1942.

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7. Cranes⁵

Number	Type	Capacity	Location
1	electric Titan crane (Gorey-Griffin) (in bad repair) ^{1a}	20 ton max. radius 50 ton min. radius	breakwater
1	travelling steam	5 tons	---
1	fixed	12 tons	---
1	fixed	2 tons ^{1a}	Shell oil installation ^{1a}
7	rolling cranes	$\frac{1}{2}$, 1, & 2 tons ^{1a}	inner harbor ^{1a}
1	lighter with grab	5 tons	---

8. Warehouses and Storage Facilities^{1a}

Number	Type	Size	Capacity	Location
1	Concrete Warehouse	450' x 50'	---	inner harbor
2	Wooden Warehouses	90' x 120'	---	inner harbor
1	Wooden Warehouse	90' x 80'	---	inner harbor
1	Shed	80' x 70'	---	inner harbor
1	Ice and cold storage plant			
	Bulk Petroleum: ^{4, 5}	---	---	inner harbor
	Benzine	---	1284 cu.m.	---
	Kerosene	---	467 cu.m.	---
	Gas oil	---	3226 cu.m.	---

⁴Shipping World Yearbook, 1940, pp. 462-3.

⁵Reply to Questionnaire on Tangier, MIS, Feb. 13, 1942.

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9. Harbor craft available.¹

4 tugs, 250, 175, 125, 75 H.P.
1 towing launch
1 lighter 150 tons
6 lighters 70 tons
8 lighters 60 tons
16 lighters 30-40 tons
various smaller lighters

Tangier depends considerably upon lighters

10. Facilities for moving goods from docks

a. Railroad track lay-out at dockside:

Standard gauge railroad to breakwater connects with
line to Fez.

There is a narrow gauge port railroad with 5
locomotives and 140 freight cars.²

b. Other: Trucks could be used over good highways southward.

11. Labor situation: No information.

12. Supplies

a. Bunkerage: Recent report indicates complete lack of supplies.^{1a}

Coal: no information

oil: See section on Bulk Fuel installations.

b. Water: Piped to breakwater¹

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13. ~~SECRET~~ Repair facilities: 1

Patent slip 40 tons capacity
Small workshop for minor repairs
Oxy-Acetyline and propagas plants
Small railroad workshops

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14. Comments:

Tangier has suffered from political maladminis-
tration. Its potentialities are greater than yearly
trade figures would suggest. It is one of the best
Moroccan ports. With an added number of automobile cranes and lighters
it could become the first port of Spanish Morocco.

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CEUTA

1. Harbor

a. Type: largest and safest harbor on Moroccan coast;¹
 largest ship to enter was "Roma", 32,538 T;
 harbor is formed by two breakwaters.¹ & ²

b. Area: 340 acres¹

2. Tides:

a. Springs: 6½ feet⁴

b. Neaps: -----

3. Entrance: 984 feet wide, 60 ft.¹

4. Anchorage: Outside of harbor

a. Depths: 60 feet¹

b. Limiting factors: Rough sea outside harbor makes
 anchorage unsuitable.¹

Inside of harbor

a. Depths: 46-52 feet¹

b. No. of ships:³ 3 anchor berths 600 feet radius, 26 ft. deep
 1 " berth " " " 21 ft. deep

¹ISIS, Morocco, No. 1940, pp. 187-193

²Revue de geog. marocaine, XVI (1932), 411-17.

³ISIS, Morocco, Pt. V, October, 1942.

⁴Great Britain, Mediterranean Pilot, I, 33

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5. Wharfage:

Identification:	Length	Depth	No. of ships	berths	600ft., min.	30ft. depth	
Dique de la Poniente	4600 ft. ¹	30-54 ft. ¹	4	"	450"	" 26 "	
			1	"	"	" 21 "	
Dique de la Levante	1900 ft. ¹	32 ft. ² minimum	1	"	600"	" 30 "	3
			1	"	450"	" 26 "	
			1	"	450"	" 21 "	
Muella de Espana	1150 ft. ¹	28 ft. ¹	1	"	600"	" 30 "	3
			1	"	450"	" 26 "	
			1	"	450"	" 21 "	

6. Capacity of port:

	Imports	Exports
a. Annual: 1929 ⁵	214,515 Tons	19,281 Tons
b. Estimated daily:	2000 ⁶	

c. Facilities for night work are poor and must be supplemented by ship searchlights.⁸

7. Cranes¹

Number	Type	Capacity	Location
1		3 Tons	Dique de la Poniente
2		2-3 Tons	Dique de la Levante

1 Titan crane for
 harbor construction
 Floating cranes are reported⁷

8. Warehouses and Storage facilities¹

Number	Type	Size	Capacity	Location
2	Warehouses	--	--	Dique de la Poniente
	Open storage area	300 x 200 x 300 yds.	--	--
	Open space	--	200,000 tons coal	Dique de la Levante
5	Fuel storage tanks	--	33,000 T. ⁷	West of port

⁵U. S. Consul, Tangier, April 20, 1931.

⁶Annotated ISIS, Morocco, Nov. 1940.

⁷NID, Morocco, II, RM 155-6.

⁸Answer to requisition, November 3, 1942.
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9. Harbor craft available:

- 1 old small tug¹
- 5 lighters¹
- 2 motor boats¹

10. Facilities for moving goods from docks:

a. Railroad track lay-out at dockside:

Vessels discharge direct to railroad cars on
 meter gauge track along Digue de la Poniente¹;
 Connected with narrow gauge railroad to Tetuan.^{1 & 2}

b. Other: Highways to French Morocco.²

11. Labor situation: no information

12. Supplies:

a. Bunkerage:

Coal: Digue de l'Est¹ Floating elevator delivers 300 T.
 per hour.⁷

Fuel oil: Berth on Digue de la Poniente, 300 Tons
 per hour. Gasoline stored in drums; ca.
 300 Tons on hand¹

Diesel oil; see section on bulk fuel installations.

b. Water: Available, one, 50 Ton water boat¹

c. Foodstuffs:

13. Repair facilities:

Minor repairs in railroad shops.¹

14. Comment:

Port has suffered from long, hard use, but Spain has attempted
 to develop here a maritime rival to Gibraltar.⁷ The port was in
 heavy use during the Rif Wars.

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MELILLA

1. Harbor

a. Type: Semi-artificial harbor enclosed at the north by a mole (Digue del Nordeste) 3300 feet long, and at the south by an uncompleted mole (Digue del Sur)

b. Area: 520 acres

2. Tides: Tides in the Mediterranean are of small range and have little practical importance.²

3. Approach: Entrance width 3900 feet³
 Depth at line of breakwater head 42 feet; 800 feet inside harbor depth is 36 feet.¹

4. Anchorage: Outside of harbor

a. depths: 48-72 feet¹

b. limiting factors: occasional winds with some swell.²

Inside of harbor¹

a. depths: East Main Basin 40 feet
 West Main Basin 20-30 feet
 Inner harbor 6-12 feet

b. no. of ships⁴ 2 anchor-berths 600ft. radius 26 ft. deep
 2 " " " " 21 "

¹Annotated ISIS Morocco, November, 1940, pp.201-5.

²Great Britain, Mediterranean Pilot, I, 38; 274-6.

³NID.Morocco II, RM 156-7.

⁴ISIS, Morocco, Pt. V, Oct. 1942.

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No. of ships5. Wharfage¹

Identification:	Length	Depths	
<u>Dique de Nordeste</u>	2000 ⁴ feet	Up to 42 feet	(1 berth 600 ft. long, min. 30 ft. deep ⁴) (2 berths 450 ft. long, min. 26 feet deep ⁴)
<u>Dique de Villa Neuve</u> ⁴			1 berth 450 ft. long, min. 21 feet deep ⁴
<u>Muelle de Seto Lazar</u>	690 ft. ⁴	Up to 33 ft. on western side	1 berth 450 ft. long, min. 21 feet deep ⁴
<u>Muelles de Ribera</u>	480 ft.	20-30 ft.	
Inner harbor ⁴	--	6-12 ft. ⁴	
Muelle de Santa Barabara (minerals)	950 ft. ⁴	27-30 ft.	1 berth 450 ft. ⁴ min. 26 ft. ⁴

6. Capacity of port

	Imports	Exports
a. Annual 1929 ⁵	131,141 tons	1,267,726 tons (almost entirely ore)
b. Estimated daily: 1600 tons (using four ships) ¹		
c. Facilities for night work are poor and must be supplemented by ships' searchlights. ⁶		

⁵U.S. Consul, Tangier, December 29, 1930.⁶Answer to requisition, November 3, 1942.

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7. Cranes¹

Number	Type	Capacity	Location
1	floating	80 tons	
1	---	5 tons	N.W. corner
			E.M. Basin
1	---	3 tons	S.E. of coaling
			quay
1	---	1 ton	S.E. of coaling
			quay
2	---	7 tons	S.E. of coaling
			quay
1	electric	40 tons	Muelles de Ribera
1	gantry	80 tons	Muelles de Ribera
	Automatic hoists and		
	conveyors	1200 tons per hr.	Mineral Pier
2	coaling cranes		

No lifting facilities in inner harbor.

8. Warehouses and Storage facilities

Number	Type	Size	Capacity	Location
2	warehouses ²	large ³		Muelles de Ribera
	Open storage space ³	---	80,000 tons	
			of ore	Mineral Pier ³

9. Harbor craft available¹

1 tug 50 H.P. and a few launches³
 several old lighters 50 tons
 fishing craft

10. Facilities for moving goods from docks

- a. Railroad track lay-out at dockside: Meter-gauge and 60 cm. railroad to coaling wharf and mineral pier. Also meter-gauge railroad to Dique del Nordeste
- b. Other Good roads southward.

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11. Labor situation:⁶ Labor poorly paid and of poor quality. Some trained mechanics and technicians available. Very few arabs among any of these.

12. Supplies

a. Bunkerage:

Coal: All is imported; normally large stock on hand³
See section on bulk fuel installations.

b. Water: Piped to Dique del Nordeste and Muelles de Ribera. No water boats.¹

13. Repair facilities: Very small workshops¹

14. Melilla ranks as a good harbor. Though commercially its development has been entirely in one direction, it was of great importance in the Riff wars and is a military stronghold today.

⁴U.S. Military attaché, Tangier, December 29, 1930

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LARACHE

1. Harbor

a. Type: Formed in estuary of Rio Luccus. It has silted up seriously.¹

b. Area: Very small and narrow.

2. Tides: No information.

3. Channel of approach: Through breakwater, 2300 feet long.³

a. Length: Winding channel to Quay 1/2 mile.¹

b. Width: Quite narrow

c. Depths: Bar at entrance subject to great changes and is unsafe from October to May.² Ships of 16-19 feet draught can pass at highwater.⁴

d. Markings: Channel lights²

4. Anchorage: Outside of harbor

a. depths: 54 feet²

b. limiting factors: heavy swell in winter season²

Inside of harbor

a. depths: 10 feet²

b. no. of ships

¹Annotated ISIS Morocco, November, 1940, pp.175-6

²Great Britain, African Pilot, I, 152-3.

³Revue de géographie marocaine, 1932-33, pp.419

⁴NID, Morocco, II, RM, 152-3.

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5. Wharfage

Identification	Length	Depth	No. of ships
Commercial quay	600 feet	13 feet at eastern end in high water	two small steamers
Fishing quay ⁵	approx. 600 ft. ⁵	---	only fishing boats ⁵

6. Capacity of port

a. Annual:	Imports	Exports
1931 ³	40,600 tons	3,400 tons
1937 ⁴	33,660 "	2,170 "
b. Estimated daily:	200 tons ¹	
c. Facilities for night work:	None	

7. Cranes¹

Number	Type	Capacity	Location
3	travelling steam	(2 ton max. radius) (12 ton reduced radius)	Commercial quay
2	mobile contractor's cranes on railroad tracks	5 tons	---

8. Warehouses and Storage facilities¹

Number	Type	Size	Capacity	Location
2	Warehouses	approx. 100x300ft. ⁵	---	commercial quay ⁵

9. Harbor craft available¹

2 tugs 150 H.P.
2 lighters 45 tons)
6 lighters 30 tons)
Fishing craft

10. Facilities for moving goods from docks

a. Railroad track lay-out at dockside; Line on commercial quay is standard gauge and joins Tangier-Fez line at El-Ksar-el-Kebir.
b. Other: Trucks could be used.

⁵ISIS, Morocco, 1942, Mosaic 2, Larache.

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11. Labor situation: No information

12. Supplies

a. Bunkerage:

Coal: scarce

Diesel fuel

and gasoline: stowed in drums and up to 200 or
300 tons of each held normally.

b. Water: No information regarding port, but city has excellent
water.⁴

13. Repair facilities: None, but there is a small yard for building fish-
ing vessels.⁵

14. Comments:

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ARCILA

1. Harbor area: fit only for fishing boats.¹ Lies on sandy beach, harbor is shoaling¹
2. Tides: no information
3. Entrance: through opening of curving breakwater.¹ This is very shallow and dangerous.²
4. Anchorage: poor
 - a. Depth: 33-48 ft.
 - b. Limiting factors: west wind causes very dangerous swell
5. Wharfage:

Identification:	Length	Depth	No. of ships
Small jetty ¹	Approx. 150 ft. ³	---	fishing vessels only
6. Capacity of port:

	Imports	Exports
a. Annual:		
1931 ²	1715 Tons	382 Tons
1936 ⁴	165 "	0 "
7. Cranes:

Type	Capacity	Location
1 construction crane	5 Tons (probably no longer there)	
8. Warehouses and Storage facilities: none⁴
9. Harbor craft available:¹
 - no tugs¹
 - several 10 Ton lighters¹
 - many fishing boats¹

¹ISIS, Morocco, Nov. 1940, pp. 179-180.

²Revue de géographie marocaine, 1932-33, pp. 417-8.

³ISIS, Morocco, 1942, Mosaic 1, Arcila.

⁴NID, Morocco, II, RM 154.

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10. Facilities for moving goods from docks: none, but Arcila is a railroad station on the Tangier-Fes railroad, and is located on the Tangier-Casablanca highway.
11. Labor situation: no information.
12. Supplies: Fuel storage only in drums.
13. Repair facilities: none.
14. Comment: This port cannot be considered as a commercial factor in the life of Spanish Morocco, and possesses little potential significance in other respects.

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RIO MARTIN

1. Harbor

a. Type: Relatively undeveloped river port for city of Tetuan. served only by lighters.

b. Area: No information

2. Tides: Mediterranean tides have very small tidal variations

3. Channel of approach: Up Rio Martin

a. Length: Port near mouth

b. Width: 650 ft. at mouth²

c. Depths: Sand bar at entrance; 2-4 ft. H.W. in summer, & 6-8 ft. H.W. in winter over bar.¹

d. Markings: Depth of river 6 ft. to 19 ft.²

4. Anchorage: Outside of harbor:

a. Depths: 46 to 60 ft.; 1 mile east of river's mouth³

b. Limiting factors: exposed to east winds⁴

5. Wharfage:

Identification:	Length	Depth	No. of ships
Small quay ¹	---	---	-----

6. Capacity of port:

a. Annual: 10,000 metric Tons handled in 1931²; 4,140 tons were imported in 1937 and 790 tons were exported.⁵

b. Estimated daily: no information

c. Facilities for night work: none

¹ ISIS, Morocco, November 1940, pp. 193-4.

² Rev. de geog. marocaine, XVI, 277-430 (Dec. 1932)

³ Great Britain, Mediterranean Pilot, I, 260.

⁴ NID, Morocco, II, RM 156.

⁵ ISIS, Morocco, Pt. V., Oct. 1942.

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7. Cranes: none

8. Warehouses and Storage facilities: no information

9. Harbor craft available:

12 small barges^{1&2}

10. Facilities for moving goods from docks:

a. Railroad track lay-out at dockside: none; the railroad to Tetuan has been dismantled.⁴

b. Other: Trucks might be used over good road to Tetuan.

11. Labor situation: no information

12. Supplies: no information

13. Repair facilities: none

14. Comment:

The commercial port is now moribund and eclipsed by Ceuta.¹ Recent reports indicate that a submarine base is under construction. Facilities include a concrete quay with a least depth alongside of 28 feet. There are plans to dredge the channel of approach with a width of 120 feet.⁵

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ALHUCEMAS (VILLA SANJUJRO).

1. Harbor:

- a. Type: Excellent small artificial harbor consisting of a quay protected by a breakwater.¹ It can be used at all seasons by vessels drawing up to 30 ft.⁴
- b. Area: no information

2. Tides: Mediterranean tides vary only slightly.

3. Channel of approach: none

4. Anchorage: Outside of harbor

a. Depths 24 feet¹

b. Limiting factors: Safe only in good weather.¹

Inside of harbor:

a. Depths: 16-82 feet⁴

b. No. of ships: Strictly limited

5. Wharfage:

Identification:	Length	No. of ships
Breakwater ⁴	1148 ft. ⁴	16 ft. at shore end ⁴ and 82 ft. at extremity Ships up to 1500 Tons; has taken ships up to 4000 Tons. ²
Western Quay ²	-----	10-20 ft. ² Small ships. ²

6. Capacity of port:

- a. Annual: Only 2 small vessels call in a year.³ In 1937 10,250 tons were imported and 2,260 tons were exported.
- b. Estimated daily: 200², but might be 300 T.
- c. Facilities for night work are poor and must be supplemented by ships' searchlights.^{1a}

Great Britain, Mediterranean Pilot, I, 268.

^{1a}Answer to requisition, November 3, 1942.

²Annotated ISIS, Morocco, Nov. 1940, 198-9

^{2a}IID, Morocco, II.

³U.S. Military Attache, Tangier, Oct. 28, 1941

⁴U.S. Dept. of Commerce, Reports..., Aug. 10, 1931, p. 370

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7. Cranes: None
8. Warehouses and Storage facilities: no information.
9. Harbor craft available: Numerous fishing craft.²
10. Facilities for moving goods from docks:
 - a. Railroad track lay-out at dockside: none
 - b. Other: possibly motor trucks over doubtful local roads branching off from the route paralleling coastline to Ceuta and Melilla.
11. Labor situation: no information.
12. Supplies: See section on Bulk Fuel installations. There is a moderate supply of water from Oued Ghis.⁴
13. Repair facilities: no information
14. Comment: Normally there is little trade here owing to the absence of transport facilities, but the port was very important for Spain during the Riff campaigns.

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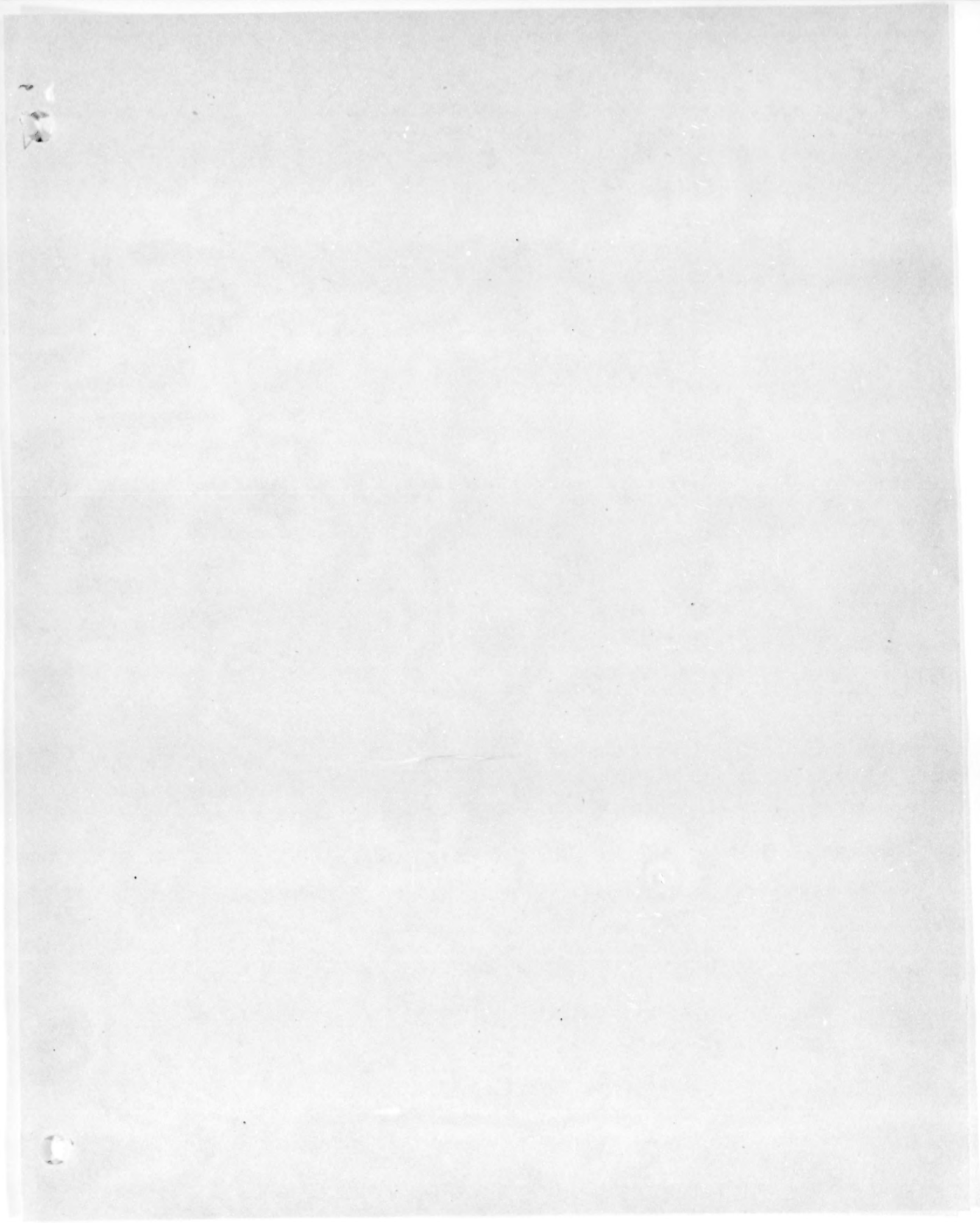
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RAILROADS
OF
SPANISH MOROCCO AND THE TANGIER ZONE

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RAILROADS

Spanish Morocco possesses only one railroad line of strategic importance, i.e., the 68 mile section standard gauge single track from the town of Tangier to the French border, 4 miles beyond El-Ksar-el-Kebir from where a 26 mile branch runs to the small port of Larache. The remaining lines consist of short meter gauge roads between Ceuta and Tetuan (26 miles) and from Melilla to the lead and iron mines in the hills to the southwest and perhaps to Tafersit, 54 miles southwest of Melilla.

The Spanish Moroccan lines just like those in French North Africa, have suffered during the last two years from an acute fuel and lubricant shortage and consequently the rolling stock is probably not in good condition.

The capacity of the Tangier line with the existing rolling stock has been estimated at 5 to 6 trains a day each way carrying 300 tons each. With additional locomotives and cars the line could probably handle almost double the present volume of traffic. All the lines are vulnerable to sea attack.

A. Tangier - French Frontier, 68.3 miles.

1. Route:¹ The line starts at the port of Tangier where a small yard and a locomotive depot are located. After crossing the Oued Morora three times the line crosses the hills behind Tangier and leaves the former International Zone at mile 11, crossing the Oued Marhar. It follows the valley of

¹Revue générale des chemins de fer, July 1934; Africa, 1931, Vol. 7, p. 61. ISIS, Northwest Africa, May 1942, pp. 21-23; Industrie des Voies Ferrées et des Transport Automobiles, XXX, Oct. 1936; O.S.S. Acc. #20352, 20358.

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the latter river over swampy ground to the coast at Arzila crossing seven small bridges and two tunnels (535 and 430 feet long respectively). From Arzila the line turns inland to pass over the pass of Guialef (elevation 377 feet) into the valley of the Loukkos. It reaches the town of El-Ksar-el-Kebir at mile 64.6 (locomotive depot, freight yard), the junction for the 26 mile branch to Larache. Immediately after leaving El-Ksar-el-Kebir the Oued Loukkos is crossed on a 443 foot bridge and three miles further the line reaches the French frontier after climbing a 1.1% grade. In French Morocco the line continues almost due south crossing the wide Oued Sebou plain before reaching Petitjean (mile 126.7), a junction on the Casablanca - Fez line.

2. Permanent way¹

Gauge: 1.435 meter (4'8½"), single track

Maximum Gradient: 1.1%

Maximum Curvature: 5°50'

Rails. Flatbottom rails weighing 36 kg. per meter (72 lbs. per yard) and 12 meters (39 feet) long are used. The rails have the following dimensions.²

Width of ball	53 mm.
Thickness of web	13 mm.
Width of foot	115 mm.
Height	128 mm.

Both ordinary and angle fish plates have been reported, weighing 8.83 and 10.5 kg. respectively.³

¹Revue générale des chemins de fer, July 1934.

²Bulletin of International Railway Congress Association, July 1936, p. 1483/37.

³Vie Technique et Industrielle, IX, 1928, p. 81.

Ties: Metal ties are used throughout sharp curves, and at the junction of the rails. The metal ties weight 66 kg. (146 lbs.) and are spaced at 1333 per km.¹ Four lugs are used per tie for rail fastenings.²

Ballast: Both rock and gravel are used as ballast, with a probable depth of 40 to 45 cm. Sublayers of ballast are as a rule seldom used, except in cases where there is a clay foundation or where the terrain is likely to be flooded as in the Oued Loukkos valley.³

Clearances: The French system of clearances for standard gauge lines has been used in the construction of the line.⁴

Sidings:⁵ The exact length of the sidings is not known.

<u>Station</u>	<u>Mile</u>	<u>Sidings</u>
Tangier	0	Branches to the quays Small freight yard
Tangier (old station)	1.5	2 dead-end sidings and 1 passing siding, Wye
Biban	12.4	2 sidings
Cuesta-Colorado	18.0	2 sidings
Arzila	29.2	2-4 sidings
El Tzenin	38.5	2 sidings
Tzalatza	49.0	2 sidings
El-Ksar-el-Kebir	64.6	4-6 sidings, freight yard.

¹Revue générale des chemins de fer, July 1934

²Vie Technique et Industrielle, IX, 1928, p. 31.

³Revue générale des chemins de fer, July 1934.

⁴Report by a former employee of the Moroccan Railroads.

⁵Report from A of Q.

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Signal System: The same system as that employed in France before the changes made after 1936 is employed.¹

Tunnels and Bridges: Two and possibly three tunnel had to be constructed on the Spanish section of the Tangier line. Their respective length is 535, 430, and 394 feet.²

It has proved impossible to locate the third tunnel. Probably 16 bridges had to be constructed varying in length from 39 to 443 feet. The most important one crosses the Oued Loukkos, south of El-Ksar-el-Kebir.³

3. Rolling Stock⁴

All the rolling stock employed on the Tangier-Fez line except the electric locomotives can be used on the Spanish section. In 1938 the following rolling stock was available.

Locomotives (Steam)	35
Passenger Cars	77
Baggage Cars	29
Freight Cars	757

Reports on additions to the rolling stock since 1938 indicate that if locomotives and cars were imported during the last four years they were mainly for replacements.

Locomotives: In 1933 the following types of locomotives were reported.⁵

¹Revue générale des chemins de fer, July 1931

²Africa, VII, 1931, p. 61

³Ibid.; ISIS, Northwest Africa, May 1942, pp. 21-23.

⁴Union International des chemins de fer. Statistique 1938.

⁵Union International des chemins de fer, Statistique, 1938, State, Casablanca, July 20, 1925; Railway Gazette, March 8, 1935; Railway Magazine, January 1939; Henry, Cours de locomotive, p. 334.

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Type	Number	Weight in service (met. tons)
2 - 8 - 2 T	21	92.7
4 - 6 - 0	9	67.8
0 - 6 - 0	5	39.2
Motor tractors	3	?

Cars: The latest available statistics are for

1938:

	<u>2 Axles</u>	<u>4 Axles</u>	<u>Total</u>	<u>Remarks</u>
Passenger	53	24	77	3753 places
Baggage	29		29	
Freight(Covered)	247		247	6.4 tons per axle
Freight(Open)	487	10	497	6.5 tons per axle
Freight (Special)	13		13	8.4 tons per axle
	—	—	—	
Total	829	34	863	

In 1934 the cars were classified as follows:¹

78 Passenger Cars (1938: 77)

1st and 2nd class	17(12 on bogies)
1st, 2nd class and restaurant	3(3 on bogies)
3d class	23(9 on bogies)
4th class	35

707 Freight Cars (1938: 757)

Covered cars	253
Gondola cars	207
Flat cars	239
Tank cars	6
Cars for rails	2

241 Service Cars (1938: ?)

Covered cars	23
Cars for rails	26
Flat cars	192

¹Revue générale des chemins de fer, July 1934, p. 23.

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Brakes: All cars are equipped with Westinghouse triple valve L brakes.¹

Fuel: Imported English coal was used before the war. Since 1940 an acute coal shortage has cut down drastically the number of trains on the line. In 1938 the locomotives on the line Tangier - Petitjean consumed 2000 tons of briquettes (7800 calories per kg.) and 5000 tons of coal (8000 calories per kg.)² Wood has been used extensively to meet the coal shortage. Fuel depots are located at Tangier and El-Ksar-el-Kebir.

Repair Shops: The main repair shops are located at Meknès in French Morocco. Smaller repairs can probably be made at the locomotive depots at Tangier and El-Ksar-el-Kebir.³

Personnel:⁴ In 1938 the personnel of the Tangier - Fez line was allocated as follows:

Administration	81
Service of Tracks and Buildings	463
Service of Stations	142
Service of Trains	37
Service of Locomotives	60
Upkeep of Rolling Stock	20
Repair Shops	263
Other	45
Total	1111

¹Revue générale des chemins de fer, July 1939.

²Union Internationale des chemins de fer, Statistique, 1938.

³Revue générale des chemins de fer, July, 1934.

⁴Union Internationale des chemins de fer, Statistique, 1938.

4. Capacity

A British source has estimated the capacity of the Tangier - Petitjean line with the available rolling stock at 5 to 6 trains a day each way, carrying 300 tons each.¹ Route capacity is above rolling stock capacity and the line could probably handle almost double its present volume of traffic with additional locomotives and cars.

In 1938 the Tangier - Fez line carried 55,977 passengers, 1,261 metric tons of mail, 375,652 metric tons of freight.²

5. Vulnerability

The line is vulnerable to sea attack on the 6 mile section north of Arzila where it runs close to the coast. Traffic could be temporarily interrupted by damage to the tunnels and above all to the bridge over the Oued Loukkos near El-Ksar-el-Kebir.

B. Larache - El-Ksar-el-Kebir, 26.1 miles

1. Route:³ This line is owned by the Spanish government and was constructed to connect the port of Larache with the main line from Tangier to Fez. At present it is occasionally used and then for military transport.⁴

¹British map, 1942.

²Union Internationale des chemins de fer, Statistique, 1938.

³ISIS, Northwest Africa, May 1942, p. 23-24; 1:50,000 maps of Spanish Morocco.

⁴Report of A of Q.

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The line starts at the port of Larache by means of a large S-curve to the station of Larache on the plateau. It continues in a southeasterly direction running to the south of the often flooded valley of the Oued Loukkos, which is finally crossed 4 miles before the terminal station El-Ksar-el-Kebir (mile 26.1, locomotive depot, freight yard).

2. Permanent way

Gauge: 1.435 meter (4'8½") single track. No other detailed information on the permanent way is available. No tunnels had to be constructed. The permanent way was originally constructed for a 1.00 meter gauge line and reported changed to standard gauge without a new survey. Consequently the grades are heavy and many of the curves unnecessarily sharp.¹ The road bed is reported to be in poor condition.²

3. Rolling Stock

No detailed information on the rolling stock of this line is available. In 1929 5 locomotives were reported for this line and the cars were described as old equipment.³ Whatever rolling stock exists, has been reported in bad condition.⁴

4. Capacity. No information available.

5. Vulnerability. The most vulnerable point of the line is probably the bridge over the Oued Loukkos, 4 miles from the terminal of El-Ksar-el-Kebir.

¹British Naval Intelligence Department, Handbook of Railways in Africa, I, June 1919, p. 56.

²Report of A of Q.

³State Department, Tangier, August 14, 1929.

⁴ISIS, Northwest Africa, May 1942, p. 23.

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C. Ceuta - Tetuan, 26 miles

1. Route¹ Starting at the port of Ceuta (small freight yard and repair shops) the line passes through two tunnels to reach Miramar (mile 2). Three more tunnels had to be constructed before the next station, Castillejos (mile 5), from where the line continues over comparatively level country close to the shore. The Fenidak, Negro, and Smir rivers are crossed on reenforced concrete bridges before reaching Rinconde-Medik (mile 16). The line then turns inland to cross some hills (elevation 262 feet) before entering the Oued Lila valley by a tunnel and reaches Tetuan at mile 26 (locomotive depot, freight yard).

2. Permanent way

Gauge: 1.00 meter (3' 3 3/8") single track. The line has been constructed so that it may be changed over to the Spanish broad gauge (5'6").²

Gradients and curvature: Probably no steep grades or sharp curves.

Signal System: Probably signals similar to those employed in metropolitan Spain are used. Such signals are only at the stations.

Sidings: Freight yards and sidings are located only at Ceuta and Tetuan.³ Both of these terminals are equipped with turntables.

Bridges and Tunnels: 6 reenforced concrete bridges and 6 tunnels had to be constructed on the line. The tunnels

¹ISIS, Northwest Africa, May 1942, p.24; NID Handbook of Railways in Africa, I, 1919 pp. 55-61.

²ISIS, Northwest Africa, May 1942.

³OSS. Acc. #20350, 20352.

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total about 1.24 miles in length; no breakdown
 No information is available on the length of the bridges.

Clearance: If the line has been constructed for the Spanish broad gauge, clearances on this line should be more than sufficient for the present rolling stock.

3. Rolling Stock

No recent information on the rolling stock of this line is available. The minimum rolling stock at the present time is probably the following:

Locomotives	14
Passenger cars	23
Freight cars	73 +

This data is obtained from a 1929 account and fragmentary reports since that year. In 1929 7 locomotives were in operation and 3 under repair.² Four additional locomotives were purchased in February 1941.³

In 1929 the car equipment consisted of the follow:⁴

Passenger Cars, 1st class	8
3d class	12
1st and 3d class	3
Mail Cars	2
Freight Cars, capacity 10 met.tons	20
capacity 15 met.tons	20
capacity 20 met.tons	5
capacity 25 met.tons	25
Ambulance Car	1

In February 1941 12 additional cars were purchased.⁵ The rolling stock is reported in bad condition.⁶

¹ISIS, Northwest Africa, May 1942.

²State, Tangier, August 14, 1929.

³ISIS, Northwest Africa, May 1942, p. 12.

⁴State, Tangier, August 14, 1929.

⁵ISIS, Northwest Africa, p. 13.

⁶Ibid.

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Fuel: Wood is used as fuel.¹

Water: At terminals only

Repair Shops: Repair shops are reported at both Ceuta and Tetuan.² Those at Ceuta are equipped with lathes, welding, and other equipment for major repairs.

4. Capacity

No recent data is available on the capacity of the line and the lack of exact information on both rolling stock and permanent way makes it impossible to estimate the theoretical capacity.

In 1928 the line carried 355,375 passengers and 51,689 metric tons of freight.³ In 1942 the line carried 3 passenger trains a day each way and was reported to be used at maximum capacity for military and civilian freight.⁴

5. Vulnerability

The line is extremely vulnerable to sea attack since most of its track and all of the tunnels and bridges have been built close to the shore.

D. Lines of Melilla

1. Route:⁵ The port of Melilla is the terminal for three lines, one belonging to the Compania Española de Minas del Riff and running via Nador to San Juan de Minas (13.6 miles),

¹ISIS, Northwest Africa, May 1942, p. 12.
2086 Acc. #20350, 20352.

³State, Tangier, August 14, 1929..

⁴ISIS, Northwest Africa, May 1942, p. 14.

⁵British Report on Railways in Spanish Morocco, December 12, 1940; ISIS, Northwest Africa, May 1942, p. 25, describes the line to Afra Minas as a 0.60 meter gauge line.

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another running parallel to the first line from Melilla to Afra Minas (12 miles), to serve the Archaurian lead mines and the Monte Axara and Monte Afra iron mines, and a possible third line connecting with the first line at Nador, from where it was constructed through Zelouan, Tistutin, Dar Druch to Tafersit (54 miles from Melilla).

Only the combination of the first and third lines would be of strategic importance, since it could serve to supply troops stationed near the French frontier. How much of this line constructed during the Rif wars is still in operation at the present time is not known.

Starting at the port of Melilla the line runs southward near the shore of the Mar Chica lagoon, passing repair shops, a locomotive depot, and a freight yard.¹ It crosses the foothills of the Gurugu mountain on a 2.7% grade to reach the junction of Nador, mile 9. From Nador the branch to San Juan de las Minas turns west rising over 3% grades through Segangan to San Juan de las Minas. Five bridges, 39 to 82 feet long, and one tunnel (321 feet) had to be built for this branch line. The Spanish military line was constructed to the southwest of Nador over a slowly rising grade to Tafersit, mile 54. Three short mining branches were constructed from Tistutin (mile 32) to Kandusi, from Dar Druch (mile 46) to Ber Tieb, from Bufarcut (mile 52) Sidi Salah.

2. Permanent way:

Very little data is available. It is probable that the maximum gradient between Melilla and Tafersit is 2.7% and

the maximum curvature 17°32'.¹ For the sector between Melilla and Nador rails 32.5 kg. per meter (65 lbs. per yard) 12 meter (39 feet) long have been reported as well as wooden ties 2 to 2.2 meters (6.5 to 7.2 feet) long.² The Rio de Oro in Melilla is crossed on a 98 foot bridge. The Melilla yards are equipped with water facilities and a turntable. Signals have been reported for Melilla and Nador.

3. Rolling Stock

No detailed information on the existing rolling stock is available.

Locomotives: According to a British report the Melilla - Nador section is using an unknown number of 2 - 6 - and 4 - 8 - 4 locomotives, weighing 49 and 87 metric tons respectively.³ In 1929 the Nador - Tistutin section had four locomotives (2 of 36 metric tons and 2 of 44 metric tons and 1 motor tractor (25.95 metric tons).⁴

Passenger and Freight Cars: The only information available refers to the Nador - Tistutin line which had in 1929 the following cars:⁵

¹British Report on Railways in Spanish Morocco. Dec. 3, 1940

²Ibid.

³ISIS, Report on Morocco, Addenda, October 3, 1941.

⁴State, Tangier, September 16, 1930.

⁵State, Tangier, September 16, 1930.

Type	Capacity (metric tons)
Passenger Cars, 1st and 3d	?
Mail Car	?
Freight Cars, Covered,	7.5 met.tons
	10 met.tons
Gondola	7.5 met.tons
	10 met.tons
Flat cars	7.5 met.tons
	10 met.tons
	25 met.tons
Tank cars	10,000 liters
	18,000 liters

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Repair Shops: Small repair shops are located at Melilla and Nador.¹ The Melilla shops are equipped for complete overhauls.

4. Capacity

The data on rolling stock and permanent way is not exact enough to permit the calculation of capacity.

In 1928 the line from Nador to Tafersit carried 117,205 passengers and 24,363 metric tons of freight; in 1929 the traffic amounted to 38,338 passengers and 28,716 metric tons of freight.²

5. Vulnerability

The line is extremely vulnerable between Melilla and Nador, (9 miles) as the entire section including terminal facilities and repair shops is open to sea attack.

¹OSS Acc.#20935 and 20349.

²State, Tangier, August 14, 1929; State, Tangier, Sept. 16, 1929

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SPANISH MOROCCO
and
THE TANGIER ZONE

R-583, Vol. II.

Economic Resources
November 20, 1942